



# भारत का राजपत्र The Gazette of India

प्राधिकार से प्रकाशित  
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नई दिल्ली, शनिवार, अप्रैल 13, 1991 (चैत्र 23, 1913)  
NEW DELHI, SATURDAY, APRIL 13, 1991 (CHAITRA 23, 1913)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके  
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

## भाग III—खण्ड 2 [PART III—SECTION 2]

पेटेन्ट कार्यालय द्वारा जारी की गई पेटेन्टों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस  
[Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE  
PATENTS AND DESIGNS  
Calcutta, the 13th April, 1991

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Telegraphic address "PATOFFICE".

Patent Office Branch,  
Unit No. 401 to 405, III Floor,  
Municipal Market Building,  
Saraswati Marg, Karol Bagh,  
New Delhi-110 005.

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Telegraphic address "PATENTOFIC".

Patent Office Branch,  
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Madras-600 002.

The States of Andhra Pradesh, Karnataka, Kerala, Tamilnadu, and the Union Territories of Pondicherry, Laccadive, Minicoy and Aminidivi Islands.

Telegraphic address "PATENTOFIS".

Patent Office (Head Office),  
"NIZAM PALACE", 2nd M.S.O. Bldg.,  
5th, 6th and 7th Floor,  
234/4, Acharya Jagdish Bose Road,  
Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

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## पेटेंट कार्यालय

एकस्व तथा अभिकल्प

कलकत्ता, दिनांक 13 एप्रिल 1991

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ता में स्थित है तथा बम्बई, दिल्ली एवं मद्रास में इसके शाखा कार्यालय हैं, जिनके प्रादेशिक क्षेत्राधिकार जोन के आधार पर निम्न रूप में प्रदर्शित हैं :—

पेटेंट कार्यालय शाखा, टोडी इस्टेट,  
तीसरा तल, लोअर परेल (पश्चिम),  
बम्बई-400 013

गुजरात, महाराष्ट्र तथा मध्य प्रदेश राज्य क्षेत्र एवं संघ शासित क्षेत्र गोआ, दमन तथा दिव एवं दावरा और नगर हवेली।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय शाखा,  
इकाई सं० 401 से 405, तीसरा तल,  
नगरपालिका बाजार भवन,  
सरस्वती मार्ग, करोल बाग,  
नई दिल्ली-110 005

हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब, राजस्थान तथा उत्तर प्रदेश राज्य क्षेत्रों एवं संघ शासित क्षेत्र चंडीगढ़ तथा दिल्ली।

तार पता—“पेटेंटोफिक”

पेटेंट कार्यालय शाखा,  
61, वालाजाह रोड,  
मद्रास-600 002

आंध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु राज्य क्षेत्र एवं संघ शासित क्षेत्र पाण्डिचेरी, लक्षद्वीप, मिनीकोय तथा एमिनिदिवी द्वीप।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय (प्रधान कार्यालय),  
निजाम पैलेस, द्वितीय बहुतलीय कार्यालय  
मकान 5, 6 तथा 7वां तल,  
234/4, आचार्य जगदीश बोस रोड,  
कलकत्ता-700 020

भारत का अवशेष क्षेत्र

तार पता—“पेटेंट्स”

पेटेंट अधिनियम, 1970 या पेटेंट नियम, 1972 में अपेक्षित सभी आवेदन-पत्र, सूचनाएं, विवरण या अन्य प्रलेख पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में ही प्राप्त किए जाएंगे।

शुल्क : —शुल्कों की अदायगी या तो नकद की जाएगी अथवा उपयुक्त कार्यालय में नियंत्रक को भुगतान योग्य घनादेश अथवा डाक आदेश या जहां उपयुक्त कार्यालय स्थित है, उस स्थान के अनुसूचित बैंक से नियंत्रक को भुगतान योग्य बैंक ड्राफ्ट अथवा चेक द्वारा की जा सकती है।

## REGISTRATION OF PATENT AGENTS

The following persons have been registered as Patent Agents under sub-section (1)(c)(ii) of Section 126 of the Patents Act, 1970

- (i) Shri C. Venkatasubramaniam,  
Door No. 15, Cross No. 17,  
Cubbonpet,  
Bangalore-560 002.
- (ii) Shri Anjan Sen,  
17, Chakraborty Road, South,  
Calcutta-700 025.
- (iii) Shri Chittaranjan Mitra,  
41, Banerjee Para Road,  
Behala, Calcutta-700 060.

## ALTERATION OF ENTRIES IN THE REGISTER OF PATENT AGENTS UNDER RULE 103 OF THE PATENTS RULES, 1972

In pursuance of applications on form 52, the address of the residence and principal place of business in respect of Shri S. B. Shah, Miss Indira S. Shah and Miss Nandini S. Shah have been altered to :

Anant Ashish,  
Amrakunj Extension,  
Near Ajmaji Ashram,  
Baroda-390 007.

## GOVERNMENT OF INDIA

## THE PATENT OFFICE

Calcutta, the 13th April, 1991

APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE  
234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20

The dates shown in the crescent brackets are the dates claimed Under Section 135, of the Patents Act, 1970.

5th March, 1991

- 195/Cal/91 Biren Das Gupta. Tubewell strainer or filter.
- 196/Cal/91 General Electric Company. Two stage v-gutter fuel injection mixer.
- 197/Cal/91 Hitachi Construction Machinery Co. Ltd. Hydraulic drive system.
- 198/Cal/91 Hitachi Construction Machinery Co. Ltd. Hydraulic-motor drive circuit system.

7th March, 1991

- 199/Cal/91 Rajarshi Bardhan. Auto-control pump device.
- 200/Cal/91 Santanu Roy. A blowing agent utilising spent sulfite liquor for use in thermosetting polymer.

201/Cal/91 Texaco Development Corporation. Dual frequency microwave water cut monitoring means and method.

202/Cal/91 E.I. Du Pont De Nemours and Company. Ternary azeotropic compositions of dichloropentafluoropropane and trans-1, 2-dichloroethylene with methanol or ethanol or isopropanol.

203/Cal/91 E.I. Du Pont De Nemours and Company. Azeotropic compositions of perfluoro-1, 2-dimethylcyclobutane with methanol and 1, 1-dichloro-1-fluoroethane or dichlorotrifluoroethane.

204/Cal/91 E.I. Du Pont De Nemours and Company. Stabilized constant-boiling, azeotrope or azeotrope-like compositions of dichlorotrifluoroethane; 1-1-dichloro-1-fluoroethane, with methanol and/or ethanol.

11th March, 1991

205/Cal/91 N. V. Philips' Gloeilampenfabrieken. Digital recording and reproducing system.

206/Cal/91 Westinghouse Electric Corporation. Improvements in or relating to circuit breaker positive off interlock.

207/Cal/91 Hoechst Celanese Corporation. A method of the preparation of N-hydroxy aspartic acid derivative.

208/Cal/91 General Electric Company. Apparatus and methods for minimizing vibrational stresses in axial flow turbines.

209/Cal/91 The Ensign-Bickford Company. Low-energy blasting initiation system and surface connection thereof.

210/Cal/91 Trutzschler GmbH & Co. Kg. Device for the braking of a rotating cylinder, eg. roller, of a spinning processing machine, eg. bale opener, cleaner, carding machine or carder.

211/Cal/91 (1) Hitachi Ltd.; (2) Hitachi Techno Engineering Co. Ltd. Control device for induction motor.

212/Cal/91 Lanxide Technology Company, Lp. Ceramic composite and methods of making the same.

APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, MUNICIPAL MARKET BUILDING, IIIRD FLOOR, KAROL BAGH, NEW DELHI-5

4th February, 1991

92/Del/91 Council of Scientific & Industrial Research, "A device for drying leather in leather industry".

93/Del/91 Warner-Lambert Co., "Razor mechanism".

94/Del/91 Motorola Inc., "Frequency agile Tdma communications system".

95/Del/91 Motorola Inc., "Packet transmission system and method".

96/Del/91 Davol Inc., "Blood pumping and processing system".

97/Del/91 The Standard Oil Co., "A process for the ammoxidation of a paraffin selected from propane and isobutane to make acrylonitrile or methacrylonitrile". [Divisional date 13th April, 1988].

7th February, 1991

98/Del/91 UOP, "Improved normal paraffin adsorptive separation using non-normal hydrocarbon pre-pulse stream".

99/Del/91 Council of Scientific & Industrial Research, "A portable digital soil salinity tester".

100/Del/91 Council of Scientific & Industrial Research, "A process for the production of leather boards".

101/Del/91 Council of Scientific & Industrial Research, "An improved aeration device".

102/Del/91 Saroj Chooramani Gopal, "A hand burr".

103/Del/91 Saroj Chooramani Gopal, "A tube introducer for introducing a drainage tube".

104/Del/91 Saroj Chooramani Gopal, "A ventriculo subarachnoid shunt for congenital hydrocephalus".

8th February, 1991

105/Del/91 Tilak Raj Wahi, "Improvements in or relating to electronic anti-theft auto alarm system".

106/Del/91 Anil Kapoor, "Draincover".

11th February, 1991

107/Del/91 Arjomari Europe, "Sheet for safety documents, having a high printability at the same time as a high resistance to circulation".

108/Del/91 Exxon Chemical Patents, Inc., "Block copolymers from ionic catalysts".

12th February, 1991

109/Del/91 BP Chemicals Ltd., "Production of dihydroxyacetone" (Convention date 27th February, 90) (U.K.).

110/Del/91 BP Chemicals Ltd., "Production of hemiformals". (Convention date 27th February, 90) (U.K.).

111/Del/91 Allen-Bradley Co. Inc., "Electric motor controller with bypass contactor".

13th February, 1991

112/Del/91 The Procter & Gamble Co., "High capacity odor controlling compositions".

113/Del/91 The Procter & Gamble Co., "Carbon containing odor controlling compositions".

114/Del/91 The Procter & Gamble Co., "Mixed odor controlling compositions".

115/Del/91 The Procter & Gamble Co., "Odor controlling compositions and articles".

116/Del/91 The Procter & Gamble Co. & Other, "Measuring Cap".

117/Del/91 Energy Conversion Devices, Inc., "Catalytic hydrogen storage electrode materials for use in electrochemical cells and electrochemical cells incorporating the materials".

14th February, 1991

118/Del/91 Ethyl Corporation, "Cyanoalkenylation process".

119/Del/91 Telefonaktiebolaget LM Ericsson, "Continuous cipher synchronization for cellular communication system".

15th February, 1991

120/Del/91 Raj Karer, "A device for the fixing of the roof of temporary structures".

121/Del/91 Exxon Chemical Patents, Inc., "Halogenation of polymers with improved neutralization".

122/Del/91 ETI explosives & Other, "Method of reducing the overloading of a borehole and explosive composition used therefor". (Convention date 16th February, 90) (U.K.).

#### ALTERATION OF DATE UNDER SEC. 16

168488 : Ante-dated November 12, 1984.  
(764/Cal/1987)

168505 : Ante-dated October 15, 1985.  
(46/Cal/1988)

#### OPPOSITION PROCEEDINGS

The opposition entered by Rameshchandra Hiralal Pithadiya to the grant of a Patent on application for Patent No. 161466 made by Suresh Chandra Suri, as notified in the Gazette of India, Part-III, Section-2, dated the 9th July, 1988, has been decided and it is ordered that the application will proceed to sealing with some amendments in the complete specification.

#### PATENTS SEALED

164789 166537 166623 166760 166850 166861 166862 166871 166872 166873 166878.

CAL—8

DEL—3

MAS—NIL

BOM—NIL

#### RENEWAL FEES PAID

146210 146643 146871 146996 147020 147318 147681 148060 148502 148964 149191 149289 149539 150170 150194 150281 150339 150347 150351 150352 150408 150412 150418 150619 150681 151238 152104 152347 152478 152482 152483 152669 153042 153115 153390 153393 153396 153426 153503 153542 153544 153680 153698 154250 154853 154856 154933 155021 155023 155144 155146 155147 155149 155151 155154 155155 155156 155178 155181 155372 155607 156236 156447

156722 156773 156774 156775 156818 157067 157086 157272 157276 157294 157397 157445 157489 157492 157493 157501 157503 157519 157529 157539 157574 157670 157678 158060 158107 158140 158267 158277 158538 158575 158670 158672 158674 158690 158694 158754 158808 158811 158872 158876 158903 158914 158944 158994 158996 159000 159018 159181 159214 159265 159277 159704 159731 159732 159762 159808 159810 159885 159924 160097 160177 160179 160181 160356 160357 160451 160512 160513 160515 160516 160539 160540 160576 160761 160838 160845 160856 160930 160970 161167 161268 161289 161330 161421 161485 161507 161620 161810 161871 161974 161976 162094 162095 162293 162295 162296 162326 162330 162451 162464 162500 162573 163048 163278 163442 163552 163675 164009 164038 164102 164177 164227 164261 164264 164266 164267 164346 164424 164436 164438 164439 164527 164583 164606 164608 164610 164707 164708 164849 164969 165159 165170 165184 165434 165471 165503 165507 165511 165513 165515 165516 165517 165520 165524 165522 165529 165575 165674 165722 165725 165728 165866 165885 165894 166004 166006 166040 166092 166100 166105 166151 166189 166210 166283 166542 166546 166547 166611 166625 166707 166708 166715 166750.

#### RESTORATION PROCEEDINGS

Notice is hereby given that an application for restoration of Patent No. 160000 dated the 2nd June, 1984 made by Mohan Mahadev Gupte on the 4th June, 1990 and notified in the Gazette of India, Part III, Section 2 dated the 6th October, 1990 has been allowed and the said patent restored.

#### COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed alongwith the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

The classifications given below in respect of each specification are according to Indian Classification and International Classification.

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

### स्वीकृत सम्पूर्ण विनिर्देश

एतद्वारा यह सूचना दी जाती है कि सम्बद्ध आवेदनों में से किसी पर पेटेंट अनुदान का विरोध करने के इच्छुक कोई व्यक्ति, इसके निर्गम की तिथि से 4 महीने या अग्रिम ऐसी अवधि जो उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटेंट नियम, 1972 के तहत विहित प्रपत्र-14 पर आवेदित एक महीने की अवधि से अधिक न हो, के भीतर कमी भी नियंत्रक, एकस्य को ऐसे विरोध की सूचना विहित प्रपत्र-15 पर दे सकते हैं। विरोध सम्बन्धी लिखित वक्तव्य, उक्त सूचना के साथ अथवा पेटेंट नियम, 1972 के नियम 36 में यथाविहित इसकी तिथि के एक महीने के भीतर ही फाइल किए जाने चाहिए।

"प्रत्येक विनिर्देश के संदर्भ में नीचे दिए वर्गीकरण, भारतीय वर्गीकरण तथा अन्तरराष्ट्रीय वर्गीकरण के अनुरूप है।"

नीचे सूचीगत विनिर्देशों की सीमित संख्या में मुद्रित प्रतियाँ, भारत सरकार बुक डिपो, 8, किरण शंकर राय रोड, कलकत्ता में विक्रय हेतु यथासमय उपलब्ध होगी। प्रत्येक विनिर्देश का मूल्य 2/- रु० है (यदि भारत के बाहर भेजे जाएं तो अतिरिक्त डाक खर्च)। मुद्रित विनिर्देश की आपूर्ति हेतु मांग पत्र के साथ निम्नलिखित सूची में यथाप्रदर्शित विनिर्देशों की संख्या सलग्न रहनी चाहिए।

रूपांकन (चित्र आरेखों) की फोटो प्रतियाँ, यदि कोई हों, के साथ विनिर्देशों की टंकित अथवा फोटो प्रतियों की आपूर्ति पेटेंट कार्यालय, कलकत्ता द्वारा विहित लिप्यान्तरण प्रभार जिसे उक्त कार्यालय से पत्र-व्यवहार द्वारा सुनिश्चित करने के उपरान्त उसकी अदायगी पर की जा सकती है। विनिर्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिर्देश के सामने नीचे वर्णित चित्र आरेख कागजों को जोड़कर उसे 4 से गुणा करके; (क्योंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रभार 4/- रु० है) फोटो लिप्यान्तरण प्रभार का परिकलन किया जा सकता है।

Ind. Cl.: 39 A [GROUP—III]  
Int. Cl.: C 01 B 17/04

168471

### PROCESS FOR PRODUCING H<sub>2</sub>S FREE GAS FROM H<sub>2</sub>S CONTAINING SOUR INDUSTRIAL GAS STREAM.

Applicant: SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B. V., A NETHERLANDS COMPANY, OF CAREL VAN BYLANDTLAAN 30, 2596 HR, THE HAGUE, THE NETHERLANDS.

Inventors: (1) DONALD CRAIG OLSON, (2) JOHN JOSEPH MILLER (deceased), (3) GEORGE CONSTANTIN BLYTAS AND (4) ZAIDA DIAZ.

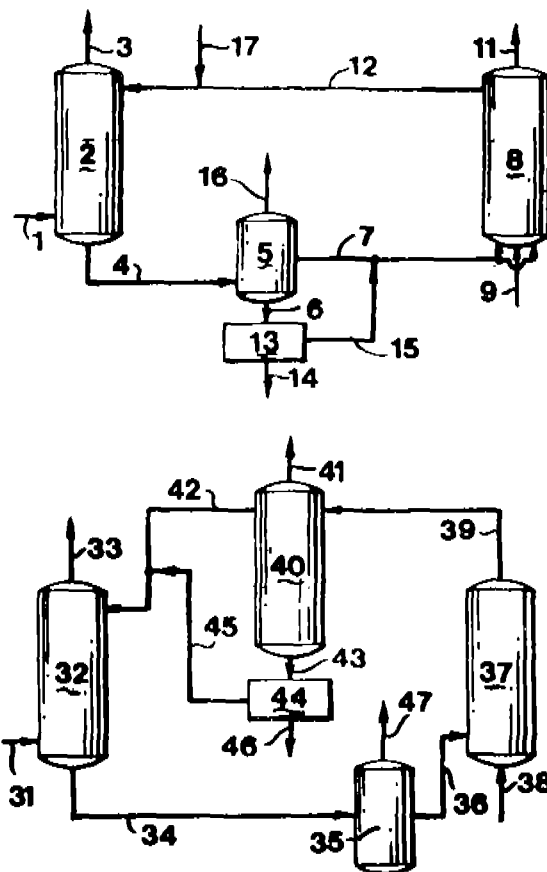
Application No. 600/Mas/86, filed on 29th July, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

6 Claims

Process for producing H<sub>2</sub>S free gas from H<sub>2</sub>S containing sour industrial gas stream comprising the steps of contacting the said sour

industrial gas stream in a contacting zone at a temperature below the melting point of sulphur with an aqueous solution of ammonium form of a coordination complex of Fe (III) with nitrilotriacetic acid and an ammonium form of coordination complex of Fe (II) with nitrilotriacetic acid, the molar ratio of complex compound containing Fe (III) to Fe (II) is between 0.2 and 6, the said solution having a pH of between 5 and 8.5, at a temperature between 10 and 80°C and a pressure between 0.1 and 15 MPa between 1 to 120 seconds, resulting in a gaseous stream having reduced H<sub>2</sub>S content and an aqueous mixture containing solid sulphur and additional ammonium form of a coordination complex of Fe (II) with nitrilotriacetic acid in solution, regenerating the said aqueous mixture by contacting with oxygen at a temperature between 10 and 80°C and a pressure between 0.1 and 0.4 MPa for a period of 10 to 60 minutes to produce a regenerated aqueous reactant solution having a molar ratio of the ammonium form of the coordination complex of Fe (III) with nitrilotriacetic acid to the ammonium form of the coordination complex of Fe (II) with nitrilotriacetic acid between 0.5 and 6; and removing solid sulphur from the aqueous mixture before or after regenerating the aqueous mixture by any known manner.



Compl. Specn. 19 Pages.

Dwg. 1 Sheet.

Ind. Cl.: 39 A [GROUP—III]  
Int. Cl.: C 01 B 17/04

168472

### PROCESS FOR PRODUCING AN H<sub>2</sub>S FREE GASEOUS STREAM FROM A H<sub>2</sub>S CONTAINING SOUR GASEOUS STREAM.

Applicant: SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., OF CAREL VAN BYLANDTLAAN 30,

168473

## 11 Claims

Dr. 1 Sheet.

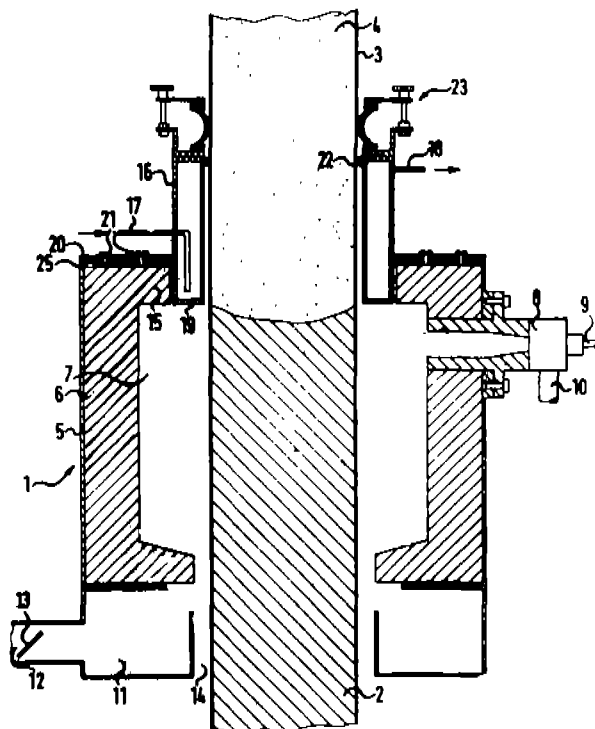
168474

## 11 Claims

The diagram shows a process flow starting with an inlet stream 1 entering a vertical vessel 2. From the bottom of vessel 2, stream 4 flows into a second vertical vessel 5. Stream 17 exits from the top of vessel 5. From the bottom of vessel 5, stream 6 flows into a pump 10. The pump output, stream 11, enters a third vertical vessel 12. Stream 13 exits from the top of vessel 12. Stream 7, which is a combination of stream 11 and stream 13, flows into a fourth vertical vessel 9. Stream 20 exits from the top of vessel 9, and stream 9 exits from the bottom. Additionally, stream 18 exits from the top of vessel 2, and stream 21 flows from vessel 2 to vessel 9.

**Draws, 2 Sheets.**

from carbonaceous electrode paste within a casing, comprising a furnace chamber, an inlet port to the chamber for entry of a casing for a carbon body, cooling means at or adjacent the inlet port, for cooling the entrance to the furnace chamber in a cooling zone at or adjacent the inlet port, and gas sealing means between the cooling means and the casing, and known means for effecting relative movement between the casing and the furnace.



Compl. Specn. 14 Pages.

Drgs. 2 Sheets.

Ind. Cl.: 129 G, G 129 Q [GROUP—XXXV]  
Int. Cl.<sup>4</sup>: B 23 K 35/08

168475

**A CORED TUBULAR ELECTRODE FOR THE ELECTRIC-ARC CUTTING OR GOUGING OF METALS.**

Applicant: EUTECTIC CORPORATION, A CORPORATION OF THE STATE OF NEW YORK, U.S.A., OF 40-40 172ND STREET, FLUSHING, NEW YORK 11358, UNITED STATES OF AMERICA.

Inventor: EDWARD R. GAMBERG.

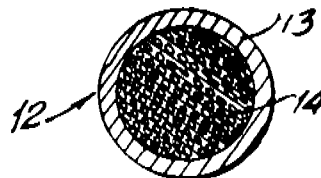
Application No. 681/Mas/86, filed on 25th August, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

11 Claims

A cored tubular metallic arc electrode for use in gas-assisted cutting and gouging of metal substrates comprising a wrought metal tube with a compacted core composition having 5 to 30% by weight of the electrode, the said core composition consisting of particulate reactant metal mixed with an exothermically reactable metal oxide and containing 0 to 30% by weight of an additive based on the total weight of the core composition, the said additive being selected from

the group consisting of arc stabilizers, fluxing agents, deoxidizers and gas formers, said particulate reactant metal having a free energy of formation of its oxide referred to 25°C of at least 100,000 calories per gram atom of oxygen, said exothermically reactable metal oxide mixed therewith having a free energy of formation thereof of not exceeding 90,000 calories per gram atom of oxygen referred to 25°C.



Compl. Specn. 20 Pages.

Drg. 1 Sheet.

Ind. Cl.: 129 Q [GROUP—XXXV]  
Int. Cl.<sup>4</sup>: B 23 K 35/04

168476

**A CORED TUBULAR METALLIC ARC ELECTRODE FOR USE IN GAS-ASSISTED CUTTING AND GOUGING OF METAL SUBSTRATES.**

Applicant: EUTECTIC CORPORATION, A CORPORATION OF THE STATE OF NEW YORK, OF 40-40, 172ND STREET, FLUSHING, NEW YORK-11358, U.S.A.

Inventor: EDWARD R. GAMBERG.

Application No. 682/Mas/86, filed on 25th August, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

7 Claims

A cored tubular metallic arc electrode for use in gas-assisted cutting and gouging of metal substrates comprising a wrought metal tube with a compacted core having 3 to 20% by weight of the electrode, said core composition consisting particulate carbonaceous material selected from the group graphite, carbon, anthracite, bituminous coal and lignite having at least 75% by weight of carbon and an additive selected from known arc stabilizers, fluxing agents and gas formers in an amount from 0 to 20% by weight of the said carbonaceous material.

Compl. Specn. 15 Pages.

Drg. 1 Sheet.

Ind. Cl.: 24 D4, F [GROUP—LV]  
Int. Cl.<sup>4</sup>: B 60 T 1/06

168477

**IMPROVEMENTS RELATING TO WHEEL INCORPORATING A BRAKE DISC.**

Applicant: LUCAS INDUSTRIES PUBLIC LIMITED COMPANY, A BRITISH COMPANY, OF KINGS ROAD, TYSELEY, BIRMINGHAM, B11 2AH, ENGLAND.

Inventors: (1) COLIN JOHN FREDERICK TICKLE, (2) DAVID CLARKE & (3) JOHN ADAMSON.

Application No. 687/Mas/86, filed on 28th August, 1986.

Convention dated 3-9-1985 No. 8521803 (United Kingdom).

Ind. Cl. : 136 F [GROUP—XIII]

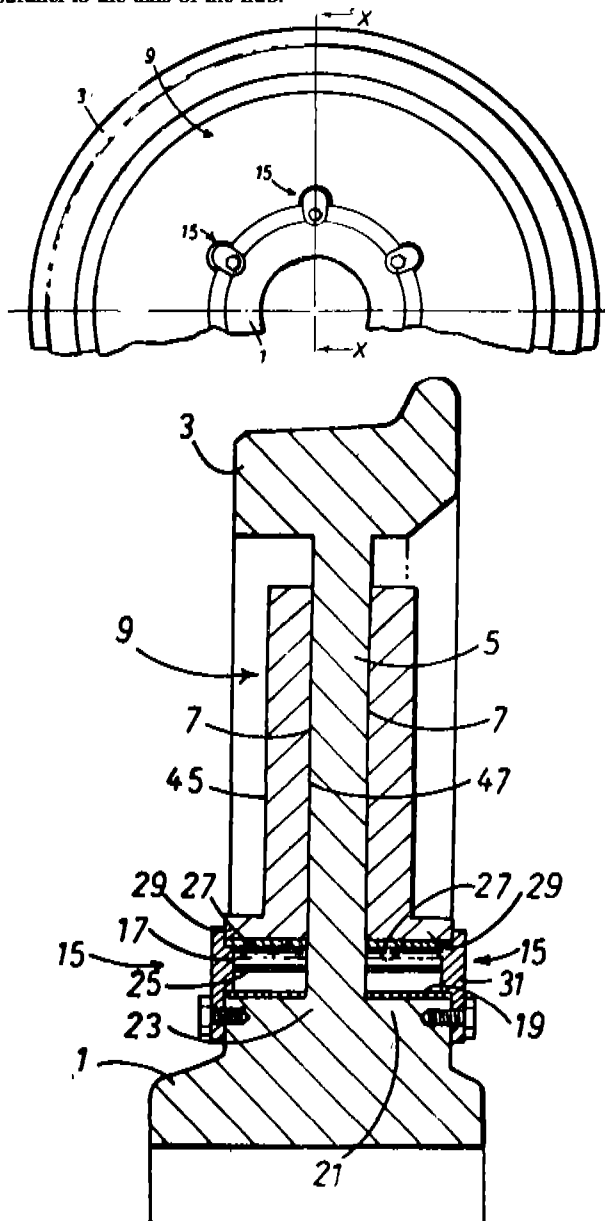
168478

Int. Cl.<sup>4</sup> : B 28 B 7/28

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 11 Claims

A wheel incorporating a braking disc comprising a central hub and outer rim, the hub and rim being interconnected by a central web, an annular braking disc being mounted on each side of the central web, each braking disc being supported on the wheel by resilient retaining connections which are located substantially parallel to the axis of the hub, each resilient retaining connection being a roll pin, which is secured to the web adjacent to said central hub, the roll pins each engaging an inner edge region of the annular braking disc, and being located in a part-cylindrical recess formed in a support member which is secured to the web adjacent to the central hub, said support members being located at circumferentially spaced apart locations around the hub with said recesses extending substantially parallel to the axis of the hub.



Compl. Specn. 14 Pages.

Drgs. 3 Sheets.

### COLLAPSIBLE MOULD CORE.

Applicant : R. CLARKE & CO. (MOULDS) LIMITED, OF CLABAS HOUSE, CHESTER HALL LANE, BASILDON, ESSEX SS 14 3DA, ENGLAND, A BRITISH COMPANY.

Inventors : WALTER WILLIAM LITTLE AND PETER REGINAL CLARKE.

Application No. 690/Mas/86, filed on 28th August, 1986.

Convention date : August 30, 1985 No. 8521591, (Great Britain).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 6 Claims

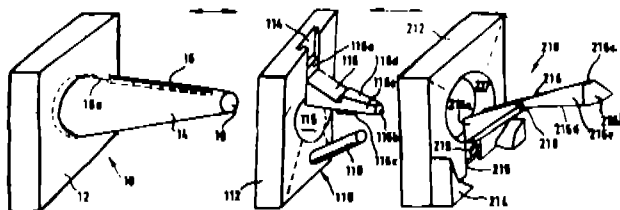
A collapsible core for a mould comprising an inner and an outer set of interdigitated segments (116, 216) which together define a continuous annulus and a tapering centre (14) disposed within the said annulus to complete the surface of the collapsible core, the tapering centre (14) being movable axially relative to both sets of segments (116, 216) and the sets of segments (116, 216) being further movable axially relative to one another,

characterised in that

(a) the core comprises three assemblies (10, 110, 210) movable relative to one another in the direction of the axis of the core, in which the first assembly (10) supports the tapering centre (14), the second assembly (110) has a first supporting plate (112) on which the first set of segments (116) is mounted for radial movement, and the third assembly (210) has a second supporting plate (212) on which the second set of segments (216) is mounted for radial movement,

(b) first guide means (16, 116c) are provided connecting the first and second assemblies (10, 110) and causing the first set of segments (116) to move radially on the first support plate (112) in response to axial movement of the first assembly (10) relative to the second assembly (110), and

(c) second guide means (118, 219) are provided connecting the second and third assemblies (110, 210) and causing the second set of segments (216) to move radially on the second support plate (212) in response to axial movement of the second assembly (110) relative to the third assembly (210).



Compl. Specn. 15 Pages.

Drg. 1 Sheet.



Ind. Cl.: 39 G [GROUP—III]  
Int. Cl.: C 01 F 7/56

168479

# PROCESS FOR THE PREPARATION OF ALUMINIUM CHLORIDE.

Applicant: ATOCHEM, A FRENCH BODY CORPORATE,  
OF LA DEFENSE, 10-4 & 8, COURS MICHELET, 92800  
PUTEAUX, FRANCE.

Inventor: DANIEL PILLET.

Application No. 697/Maa/86, filed on 29th August, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents  
Rules, 1972), Patent Office, Madras Branch.

20 Claims

Process for the preparation of aluminium chloride comprising mixing aluminous substance such as clay, bauxite, Bayer Process alumina or the like with carbonaceous substance selected from graphite powder, petroleum coke or wood charcoal, agglomerating the said mixture with a known binding agent into agglomerates of dimension from 3 to 10 cm, calcining said agglomerates at a temperature of 700° to 1000°C and chlorinating the calcined product with a gas comprising chlorine and oxygen at a temperature of 700° to 900°C wherein the proportions by weight of the said aluminous substance the carbonaceous substance and the binding agent in the mixture being from 37 to 42, 37 to 42 and 10 to 15 respectively, such that the gravimetric ratio of carbon/oxides after calcination is from 1:1 to 1:3:1.

Compl. Specn. 19 Pages.

Drg. Nil.

Ind. Cl.: 172 A [GROUP—XX]  
Int. Cl.: B 65 H 67/04

168480

# A BOBBIN HOLDER.

Applicant: PALITEX PROJECT-COMPANY GmbH, A GER-  
MAN COMPANY OF WEESERWEG 60 POSTFACH 2228 D-4150  
KREFELD 1 GERMANY.

Inventor: HEINZ STENMANS.

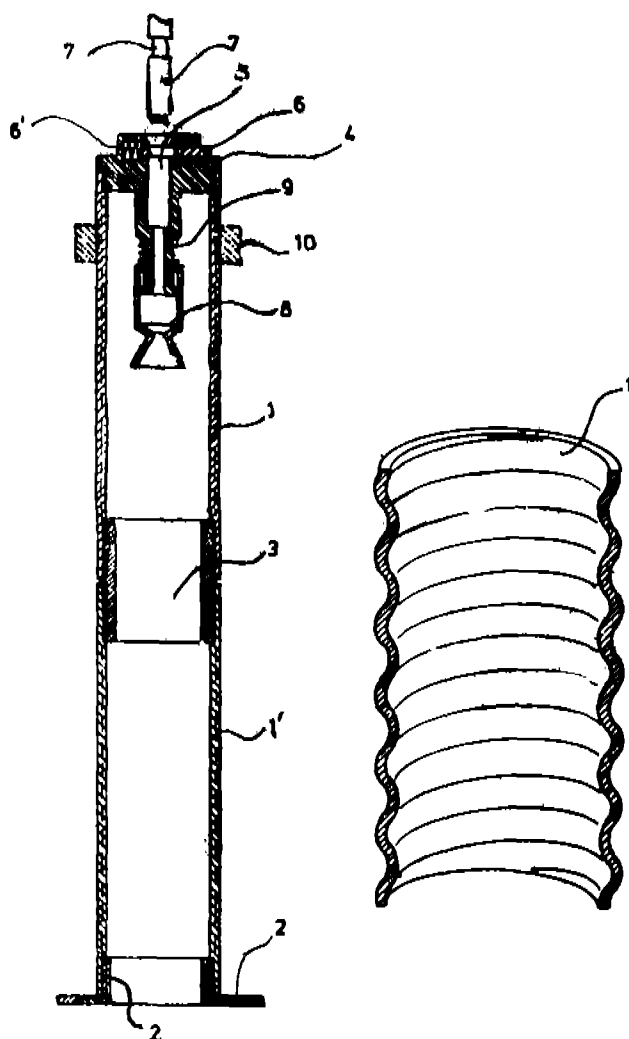
Application No. 796/Maa/86, filed on 8th October, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents  
Rules, 1972), Patent Office, Madras Branch.

16 Claims

A bobbin holder, consisting of a tubular reception body which is to be inserted loosely and removably into a bobbin carrier and the lower end of which is provided with a radially projecting support for a bobbin sleeve, wherein the reception body contains at least two axially aligned tube-portions which are connected in such a way that the total length of said combined tube-portions is variable.

2—G—17 GI/91



Compl. Specn. 10 Pages.

Drgs. 3 Sheets.

CLASS: 31 B

168481

Int. Cl.: H 01 F 29/00, 37/00, 39/00.

# A NOVEL ELECTRONIC CHOKE FOR FLUORESCENT LAMPS.

Applicant & Inventor: GOBIND SANWARIA, SONE PATTI,  
P.O. JHARIA, DHANBAD, BIHAR, INDIA.

Application No. 705/Cal/87, filed on 7th September, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents  
Rules, 1972), Patent Office, Calcutta.

4 Claims

A novel electronic choke for use in igniting fluorescent lamp such as fluorescent tubes comprising a conventional integrated circuit made of a block of nonconductive material such as bakelite housing therein silicon powder, two pairs of metallic pins or tags provided in

the said block and connected to said silicon powder, viz a first pair and a second pair, said first pair and said second pair each having a conventional capacitor independently interconnecting the two pins of respective pair and one said pair adapted to provide a negative lead from one of its tags while its other tag is adapted to be connected to one terminal of main power supply while the other pair is adapted to provide a positive lead from one of its tags while its other tag is adapted to be connected to the other terminal of main power supply the said positive lead being further provided with a compatible conventional resistance.

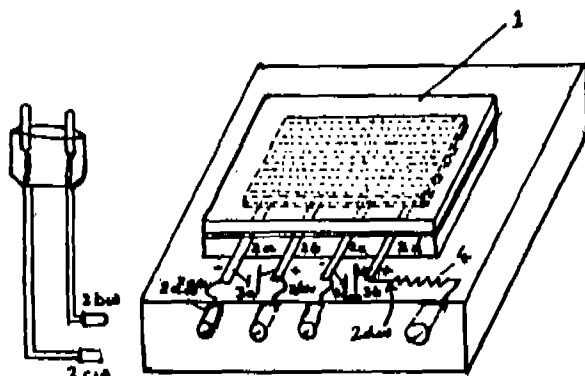


Fig. 1

Compl. Specn. 9 Pages.

Drg. 1 Sheet.

CLASS : 35 E  
Int. Cl.: C 04 B 35/00

168482

#### PRODUCTION OF CERAMIC ARTICLES INCORPORATING POROUS FILLER MATERIAL

Applicant: LANXIDE TECHNOLOGY COMPANY, LP,  
TRALEE INDUSTRIAL PARK NEWARK, DELAWARE 19711,  
U.S.A.

Inventors: (1) DAVE KENNETH CREBER & (2) ADAM  
JAN GESING.

Application No. 706/Cal/87, filed on 7th September, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents  
Rules, 1972), Patent Office, Calcutta.

#### 14 Claims

A method of making a ceramic article comprising a substantially functionally inert filler material incorporated in a ceramic matrix of an oxidation reaction product, including the steps of:

(a) orienting a body of a parent metal such as herein described and a permeable mass of filler material such as herein described relative to each other for infiltration of the oxidation reaction product such as herein described into the permeable mass;

(b) in the presence of a vapor phase oxidant such as herein described melting the parent metal body and reacting the molten metal with the oxidant to form oxidation reaction product, by heating to a predetermined temperature and at said temperature maintaining at least a portion of said oxidation reaction product in contact with and between said body of molten metal and said oxidant, to progressively draw molten metal and said oxidant, to progressively draw molten

metal through the oxidation reaction product towards the oxidant and the filler material so that the oxidation reaction continues to form within said mass of filler material at the interface between the oxidant and previously formed oxidation reaction product and continuing said reaction for a time sufficient to infiltrate at least a portion of the said mass of filler material,

wherein the improvement comprises

(c) the permeable mass comprising a first pore system constituted of intraparticle porosity distributed throughout the mass and a second pore system constituted of intraparticle porosity also distributed throughout the mass, both systems of porosity being defined within or between portions of the filler material, and at least the portions of the filler material defining the second pore system being structurally stable, during infiltration of oxidation reaction product, in maintained pore-defining arrangement.

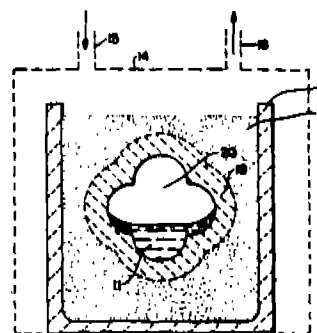


Fig. 1

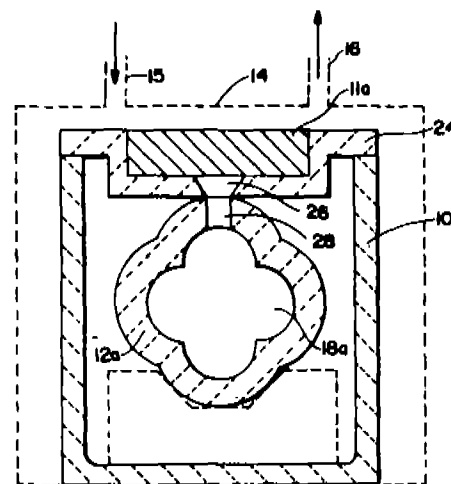


Fig. 2

Compl. Specn. 40 Pages.

Drgs. 3 Sheets.

CLASS : 35-E.  
Int. Cl.: C 04 b 35/00.

168483

#### METHOD FOR PRODUCING A SELF SUPPORTING CERAMIC COMPOSITE.

Applicant: LANXIDE TECHNOLOGY COMPANY, LP;  
TRALEE INDUSTRIAL PARK NEWARK, DELAWARE 19711,  
U.S.A.

Inventors : (1) HAROLD DANIEL LESHER, (2) CHRISTOPHER ROBIN KENNEDY, (3) DANNY RAY WHITE, (4) ANDREW WILLARD URQHART.

Application No. 707/Cal/1987, filed on 7th September, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

#### 12 Claims

A method for producing a self-supporting ceramic composite comprising a ceramic matrix obtained by oxidation of an aluminum parent metal to form a polycrystalline material comprising oxidation reaction product of the parent metal with at least one oxidant including a vapor-phase oxidant and a filler infiltrated by said matrix, said method comprising : (A) orienting said aluminium parent metal and a filler material relative to each other so that formation of the oxidation reaction product will occur in a direction towards and into said filler, said filler material bearing a coating of a silicon source on at least a portion of said filler different in composition from a primary composition of said filler, said silicon source possessing intrinsic doping properties; (B) heating said aluminium parent metal to a temperature of from 700 to 1450°C to form a body of molten aluminium parent metal; (C) reacting the molten aluminium parent metal with said oxidant at said temperature to form the oxidation reaction product; (D) maintaining at said temperature at least a portion of said oxidation reaction product in contact with and between said body of molten metal and said oxidant, to progressively draw molten metal through the oxidation reaction product towards the oxidant and into the filler material so that oxidation reaction product continues to form within said filler at an interface between the oxidant and previously formed oxidation reaction product; and (E) continuing said reaction for a time sufficient to infiltrate at least a portion of said filler with said polycrystalline material so as to produce the desired ceramic composite.

Compl. Specn. 30 Pages.

Drgs. 4 Sheets.

CLASS : 35-E.

168484

Int. CL : C 04 b 35/00.

#### A METHOD OF PRODUCING SELF SUPPORTING CERAMIC COMPOSITE.

Applicant : LANXIDE TECHNOLOGY COMPANY, LP; TRALEE INDUSTRIAL PARK NEWARK, DELAWARE 19711 U.S.A.

Inventors : (1) MARC STEVENS NEWKIRK, (2) DANNY RAY WHITE, (3) RATNESH KUMAR DWIVEDI.

Application No. 708/Cal/1987, filed on 7th September, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

#### 13 Claims

A method for producing a self-supporting ceramic composite comprising (i) a ceramic matrix obtained as an oxidation reaction product of a parent metal such as herein described with a vapor-phase oxidant such as herein described, and (ii) at least a filler such as herein described infiltrated by said ceramic matrix, which comprises : (a) orienting a first source of parent metal and a permeable

bed of filler material relative to each other so that formation of the oxidation reaction product will occur in a direction towards and into said bed of filler material; (b) heating said first source of parent metal to a temperature above the melting point of the parent metal but below the melting point of the oxidation reaction product viz. 850° to 1450°C for aluminium parent metal in the presence of a vaporphase oxidant such as air optionally in conjunction with at least one dopant material as herein described to form a body of molten parent metal and reacting said molten parent metal with said oxidant at above a temperature to form an oxidation reaction product, which product is in contact with, (said) and extends between, said body of molten parent metal and said oxidant; (c) maintaining said temperature to progressively draw molten metal through said oxidation reaction product towards said oxidant so that the oxidation reaction product continues to form at the interface between the oxidant and previously formed oxidation reaction product; (d) continuing said reaction to produce a polycrystalline material comprising oxidation reaction product and, optionally, one or more metallic constituents; (e) size reducing said polycrystalline material to particulate size for use as a filler and forming a permeable mass of said particulate filler; (f) orienting a second source of parent metal and said permeable mass of said particulate filler relative to each other so that formation of an oxidation reaction product will occur in a direction towards and into said mass of particulate filler; (g) repeating the process steps of (b), (c) and (d) above with said second source of parent metal; and (h) continuing said reaction for a time sufficient so that oxidation reaction product infiltrates at least a portion of said mass of particulate filler thereby forming said ceramic composite.

Compl. Specn. 31 Pages.

Drgs. 2 Sheets.

CLASS : 35-E; 193.

168485

Int. CL : B 32 b 18/00; C 04 b 35/58.

#### METHOD FOR PRODUCING A CERAMIC COMPOSITE BODY.

Applicant : LANXIDE TECHNOLOGY COMPANY, LP; TRALEE INDUSTRIAL PARK NEWARK, DELAWARE 19711 U.S.A.

Inventors : (1) MARC S. NEWKIRK (2) H. DANIEL LESHER.

Application No. 716/Cal/1987, filed on 8th September, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

#### 16 Claims

A method for producing a ceramic composite body maintained under compressive stress by an encasement member, said composite body comprising (1) a ceramic matrix such as herein described, obtained by oxidation of a parent metal such as herein described, to form a polycrystalline material comprising (i) an oxidation reaction product such as herein described, of said parent metal with an oxidant such as herein described, and (2) a mass of filler embedded by said matrix, the method comprising steps :

- (a) heating a parent metal to a temperature region above its melting point but below the melting point of its oxidation reaction product to form a body of molten parent metal;
- (b) contacting said molten parent metal with a mass of filler material such as herein described, in the presence of an oxidant, at least a portion of said filler being contained

within an encasement member and said filler being in conforming engagement with at least a portion of an interior surface of said encasement member, whereby said interior surface defines a surface boundary of said mass of filler material so that formation of oxidation reaction product will occur in a direction toward and into said mass of filler material; and

- (c) at said temperature region (1) reacting said molten metal with said oxidant to form said oxidation reaction product, (2) maintaining at least a portion of said oxidation reaction product in contact with and between said molten parent metal and said oxidant, to progressively draw molten parent metal through the oxidation reaction product towards the oxidant so that fresh oxidation reaction product forms within said filler at an interface between said oxidant and previously formed oxidation reaction product, and (3) continuing said reaction until said polycrystalline material has infiltrated said filler to at least a portion of said surface boundary to produce said ceramic composite body, and (4) recovering said ceramic composite body having said encasement member intrinsically fitted there for maintaining said composite body under compressive stress.

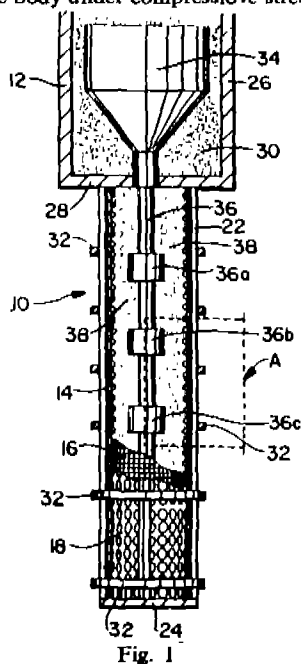


Fig. 1

Compl. Specn. 36 Pages.

Drg. 1 Sheet.

CLASS : 25-E; 193.

168486

Int. Cl. : C 04 b 35/00; 35/18.

#### AN IMPROVED METHOD FOR PRODUCING COMPOSITE CERAMIC STRUCTURES USING DROSS.

Applicant : LANXIDE TECHNOLOGY COMPANY, LP; OF TRALEE INDUSTRIAL PARK, NEWARK, DELAWARE 19711-5444, U.S.A.

Inventors : (1) S. K. NADKARNI, (2) NARASIMHA S. RAGHAVAN.

Application No. 736/Cal/1987, filed on 15th September, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

15 Claims

A method for producing a self-supporting ceramic or ceramic composite structure adapted or fabricated for use as an article of commerce comprising (1) a ceramic matrix obtained by oxidation of a parent metal to form a polycrystalline material consisting essentially of (i) the oxidation reaction product of said parent metal with one or more oxidants and, optionally, (ii) one or more metallic constituents; and (2) one or more fillers embedded by said matrix, the method comprising the steps of (a) orienting said parent metal and a permeable mass of filler relative to each other so that formation of said oxidation reaction product will occur in a direction towards and into said mass of filler; and (b) heating said parent metal to a temperature above its melting point but below the melting point of said oxidation reaction product to form a body of molten parent metal and reacting the molten parent metal with said one or more oxidants at said temperature to form said oxidation reaction product, and at said temperature maintaining at least a portion of said oxidation reaction product in contact with and extending between said body of molten metal and said oxidant, to draw molten metal through the oxidation reaction product towards the one or more oxidants and towards and into the adjacent mass of filler so that oxidation reaction product continues to form within the mass of filler at the interface between the one or more oxidants and previously formed oxidation reaction product, and continuing said reacting for a time sufficient to infiltrate at least a portion of said filler with said polycrystalline material, the improvement which comprises providing dross such as herein described obtained from a metal melting operation, comminuting said dross, and forming said dross as a permeable mass of filler for use in step (a) above.

Compl. Specn. 32 Pages.

Drg. Nil.

CLASS : 25-D; 193.

168487

Int. Cl. : C 04 b 35/00.

#### PRODUCTION OF CERAMIC AND CERAMIC-METAL COMPOSITE ARTICLES INCORPORATING FILLER MATERIALS.

Applicant : LANXIDE TECHNOLOGY COMPANY, LP; OF TRALEE INDUSTRIAL PARK, NEWARK, DELAWARE 19711, U.S.A.

Inventors : (1) TERRY DENNIS CLAAR, (2) STEVEN DOUGLAS POSTE, (3) ADAM JAN GESING, (4) MAREK JOSEF SOBCZYK, (5) NARASIMHA SRINIVAKA RAGHAVAN, (6) DAVID KENNETH CREBER, (7) ALAN SCOTT NAGELBERG.

Application No. 738/Cal/1987, filed on 15th September, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

33 Claims

A method for producing a ceramic and ceramic-metal composite article incorporating filler material comprising a self-supporting polycrystalline material obtained by oxidation reaction of a molten parent metal such as herein described with a vapor-phase oxidant comprising :

- (a) heating a parent metal in an oxidizing atmosphere at a temperature above its melting point and contacting the resulting molten metal body with a permeable mass of filler such as herein described, said mass exhibiting inter-particle pore volume,
- (b) maintaining said temperature for a time sufficient to enable (i) infiltration of said filler by said molten metal and (ii) oxidation reaction of said metal with said vapor-phase oxidant, under conditions such as herein described which control the respective rates of said metal infiltration and said oxidation reaction such that the oxidation reaction takes place between molten parent metal and oxidant within at least a portion of the inter-particle pore volume of the infiltrated mass of filler so that the oxidation reaction product so formed within said mass, together with the unoxidized portion, if any, of the parent metal provides a matrix embedding the filler particles,
- (c) recovering said composite.

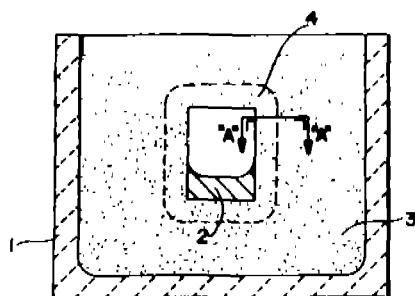


Fig. 1

Compl. Specn. 40 Pages.

Drgs. 3 Sheets.

CLASS : 46-E.

168488

Int. Cl. : G 07 g 1/00.

A HAMMER ASSEMBLY FOR USE IN A CHECK ENCODING APPARATUS.

Applicant : MAVERICK MICROSYSTEMS INTERNATIONAL, INC., OF 13242 NORTHEAST 16TH STREET, BELLEVUE, WASHINGTON, U.S.A.

Inventor : KEN L. DIVIN.

Application No. 764/Cal/1987, filed on 25th September, 1987.

[Divisional of Appln. No. 779/Cal/1984 Ante-dated to 12th November, 1984]

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 4 Claims

A hammer assembly for use in a check encoding apparatus which includes a MICR ribbon and a print font having characters thereon, comprising :

a low mass, non-metallic hammer means, positioned relative to the print font such that the ribbon and a check to be encoded are located between said hammer means and the print font, said hammer means in operation driving the check and a portion of the ribbon against a selected character on the print font for encoding the selected character on the check; and

means for moving said hammer means at a sufficient speed such that substantially all of the MICR ink on the ribbon to print the selected character is released on to the check upon impact thereof against the selected character on the print font, wherein said hammer means has a sufficiently low mass so as to avoid indentation of the check during encoding thereof.

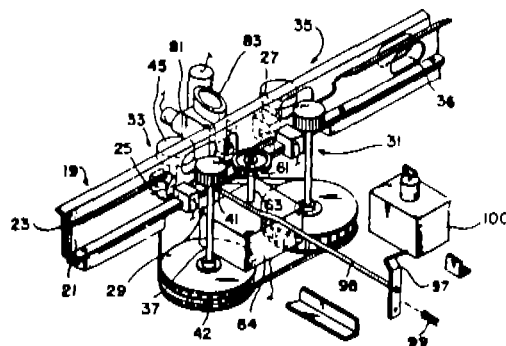


Fig. 3

Compl. Specn. 21 Pages.

Drgs. 5 Sheets.

CLASS : 185-A, D1, D2.

168489

Int. Cl. : A 23 f 3/00.

AN IMPROVED CTC MACHINE USED IN PROCESSING OF TEA LEAVES.

Applicant : STEELS WORTH PVT. LTD., 17 GANESH CHANDRA AVENUE, CALCUTTA-700013, WEST BENGAL, INDIA.

Inventor : MANGALORE PREBHAKAR PRABHU.

Application No. 789/Cal/1987, filed on 9th October, 1987.

Complete Specification left 9th January, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 2 Claims

An improved CTC machines used in the processing of tea leaves having a pair of contra-rotating rollers and other conventional components, one of said pair of rollers being a slow-speed roller and the other being a high-speed roller wherein

- (a) the said slow-speed roller has an axially inward tapered central portion from pulley end, and a matching tapered centering piece for the tapered portion in the place of usual integral rotating shaft;
- (b) said tapered centering piece is secured in position by means of a split cone, retaining ring and distance piece accommodated axially in the hollow of a shaft held to the said pulley end of the slow-speed roller, the hollow shaft being secured to the slow-speed roller through its flange by means of a set of bolts and nuts;
- (c) the said hollow shaft being provided with a single bearing housing having a roller bearing;

- (d) the other free end of the slow-speed roller namely the end away from the pulley end, being also provided with an axially inward tapered central portion and a matching tapered centering piece for the tapered portion in place of the usual integral rotating shaft;
- (e) said tapered centering piece being held in position by means of a split cone, retaining ring, the free end of the tapered centering piece being in abutting relationship with a rod housed within a hollow shaft held to the said other end of the slow-speed roller through its flange by means of set of bolts and nuts;
- (f) the said hollow shaft being provided with a single bearing housing having a ball bearing;
- (g) the said pulley being mounted on the free end of the hollow shaft at the pulley end beyond the said roller bearing;
- (h) the free end of the hollow shaft at the said other end of the slow-speed roller being provided with mounting and dismantling arrangement and, wherein;
- (i) both the pulley end and the free or pinion end of the other roller namely the high-speed roller are provided with axial inward taper, matching tapered centering pieces, split cones, retaining rings and hollow shafts as are provided for the slow-speed roller;
- (j) the said hollow shafts of the high speed roller being also provided with ball bearing and roller bearing, the ball bearing being provided at the pulley end of the high speed roller and the roller bearing being provided at the free or pinion end, of the high speed roller, the said bearing being secured to the ends of the high-speed roller in a manner similar to the slow-speed roller;
- (k) one end of the high-speed roller being provided with a pulley system provided at the free end of the hollow shaft beyond the ball bearing assembly in said shaft while;
- (l) the free end of the other hollow shaft being provided with a mounting and dismantling arrangement having a non-rotatably held pinion;
- (m) the pulley of the high-speed roller being the drive pulley driven by a motive power, the pinion at the other end of the high speed roller being coupled to a gear system, said gear system being coupled to the pulley of the slow-speed roller at desired ratio and speed;
- (n) wherein the mounting and dismantling arrangement for the slow-speed roller at its pulley end and for the high-speed roller at its pulley free end are identical and comprise in each case; and
- (o) a housing internally threaded at both ends one of which end engages the externally threaded surface of a first cover secured to the bearing assembly respectively at the pulley free end of the slow-speed roller or the pulley end of the high-speed roller while the other internally threaded end of said housing engages the externally threaded surface of a second cover secured to the external free end respectively of the pulley free end of the slow-speed roller or the pulley end of the high-speed roller, through a locking nut which is threadably engaged to one end of a pulley nut which in turn is threadably engaged at its other end with one end of a self aligning sleeve holding the bearing assembly in position.

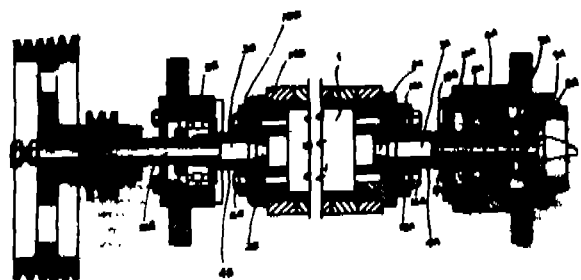


Fig. 1

Compl. Specn. 23 Pages.  
Prov. Specn. 14 Pages.

Drp. Nil.  
Drgs. 2 Sheets.

CLASS : 40-F, 129-Q.  
Int. Cl. : B 29 c 65/02, 65/72, 65/74.

168490

### APPARATUS AND METHOD FOR FUSION JOINING PLASTIC PIPE.

Applicant : GEORGE FISCHER AG., OF CH-8201 SCHAFHAUSEN, SWITZERLAND.

Inventor : HANSELKA REINHARD.

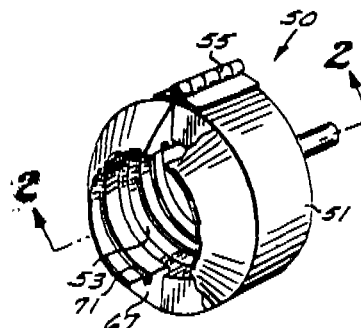
Application No. 791/Cal/1987, filed on 12th October, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

28 Claims

An apparatus for fusion joining first and second axially abutted piping system component connection ends that are in axial and circumferential alignment, comprising :

heating means for enabling the heating of a melt region in the proximity of the interface of the first and second piping system component connection ends at least to the material softening point of the thermo-plastic material of the melt region; and means for applying vacuum in the said melt region for vacuummetrically inducing outward translation of the melted material of the melt region.



Compl. Specn. 35 Pages.

Drp. 4 Sheets.

CLASS : 145-A, B; 90-I.  
Int. Cl. : C 03 c 14/00.

168491

GLASS MICROFIBRE-BASED PAPER AND HIGH PERFORMANCE AEROSOL FILTER, BATTERY SEPARATOR ELEMENT OR COMPOSITE PAPER COMPRISING SAID GLASS MICRO-FIBRE BASED PAPER.

**Applicant :** ORGEL, OF 18 AVENUE D'ALSACE 92400 COURVEVOIE, FRANCE.

**Inventors :** (1) JEAN-BAPTISTE RIEUNIER, (2) MARCEL FONTAR, (3) PATRICK BERNARD LE BRETON.

**Application No.** 832/Cal/1987, filed on 26th October, 1987.

**Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.**

#### 6 Claims

Glass microfibre-based paper comprising glass microfibres of 2 to 3 microns diameter, or microfibres of less than 1 micron diameter, and mixtures thereof the microfibres having a microaire degree 4.0—4.5 1/mm for microfibres having a diameter of 2-3 microns, and 0.4—0.5 1/mm for microfibres having a diameter of 1 micron and the specific gravity of these respective microfibres is 0.5—0.7 m<sup>3</sup>/g and 2.5—3 M<sup>3</sup>/g wherein the said microfibres are glass fibres produced by means of an annular gas flow drawing process performed at elevated velocity and temperature, the flow passing over the peripheral wall of a centrifuge, molten glass filaments escaping to the outside through orifices in the peripheral wall of the centrifuge and the peripheral velocity of which is between 50 and 90 m/sec, the amount of glass drawn being, for 2 to 3 microfibres, less than 6 tonnes per day and per metre of centrifuge periphery and for microfibres of less than 1 micron, less than 1 tonnes per day and per metre of centrifuge periphery, the velocity of said annular gas flow being 200 to 250 m/sec in the case of 2 to 3 micron microfibres and 300 to 320 m/sec for microfibres of less than 1 micron, the paper surface mass being less than or equal to 100 g/m<sup>2</sup>, its density being less than 100.

**Compl. Specn.** 20 Pages.

**Drg.** Nil.

**CLASS :** 98-D, E.  
**Int. Cl. :** F 28 f 9/00.

168492

**A U-BEND TUBE SUPPORTING DEVICE FOR USE WITH A TUBE BUNDLE IN HEAT EXCHANGER.**

**Applicant :** PHILLIPS PETROLEUM COMPANY, OF BARTLESVILLE, STATE OF OKLAHOMA, 74004, U.S.A.

**Inventor :** CECIL CALVIN GENTRY.

**Application No.** 839/Cal/1987, filed on 27th October, 1987.

**Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.**

#### 24 Claims

A U-bend tube supporting device for use with a tube bundle positionable in a heat exchanger housing and having a first pass and a second pass, support means for supporting said first and second passes, and a U-bend tube portion adjacent the support means for interconnecting the passes, said device comprising :-

frame means attached to said support means and disposed adjacent longitudinally outer ends of tubes in said U-bend tube portion; and

divider means extending from said frame means between said tubes in said U-bend tube portion;

wherein, said frame means and said divider means are not directly supported by said housing.

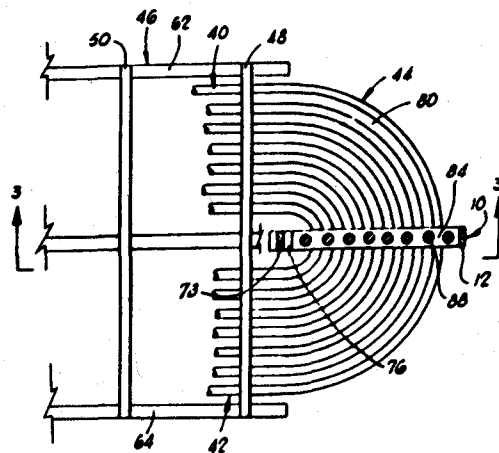


Fig. 2

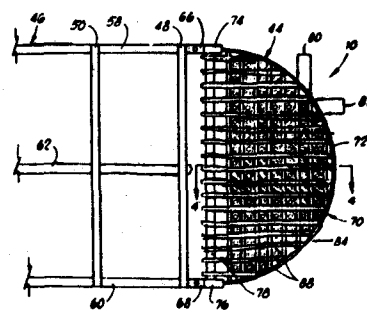


Fig. 3

**Compl. Specn.** 28 Pages.

**Drgs.** 5 Sheets.

**CLASS :** 129-G.  
**Int. Cl. :** B 23 p 9/00, B 24 b 31/00.

168493

**APPARATUS FOR FINISH-MACHINING A WORKPIECE.**

**Applicant :** SPETS IALNOE KONSTRUKTORSKO-TEKHNOLOGICHESKOE BJURO KOMPRESSORNOGO I KHOLODILNOGO MASHINO-STROENIA PROIZVODSTVENNOGO OBIEDINENIA "ODESKHOLODMASH", OF ODESSA, ULITS A BRATIEV ACHKANOVYKH, 39A, USSR.

**Inventors :** (1) EFROIM KHASKELEVICH ROITERSHTEIN, (2) GRIGORY SEMENOVICH ANTONENKO, (3) ANATOLY IVANOVICH BONDARCHUK.

**Application No.** 849/Cal/1987, filed on 30th October, 1987.

**Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.**

#### 4 Claims

An apparatus for finish-machining a workpiece mountable between a headstock and a tailstock of a machine comprising an articulated four-link chain with one of the link which is provided at the lower level thereof is secured on the said machine; a vibration device; an armature of said vibration drive pivotally connected to another link of said four-link chain; an arm pivotally secured on a

free link of said articulated four-link chain; an abrasive stone secured to the end of said arm, at least one of said links of the four-link chain connection to said link secured on the machine being provided at an angle to a plane perpendicular to a generating line of said workpiece coinciding with the line of contact thereof during machining with the central portion of the working surface of said abrasive stone, axes of pivots of said four-link chain being provided perpendicularly to a plane tangent to said workpiece and extending through said generating line, whereas the axis of the pivot of said arm is provided parallel with said generating line to rest in said plane tangent to said workpiece and extending through said generating line.

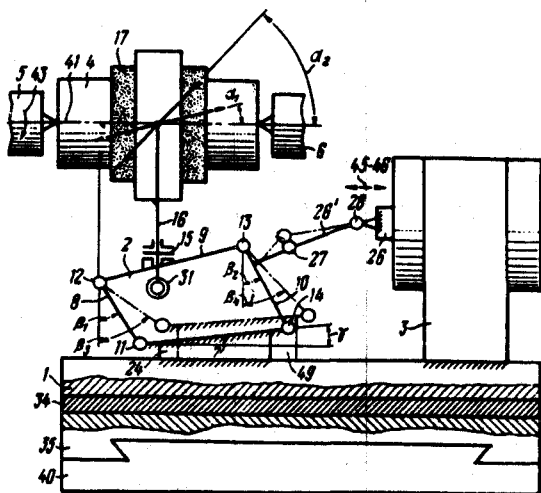


Fig. 1

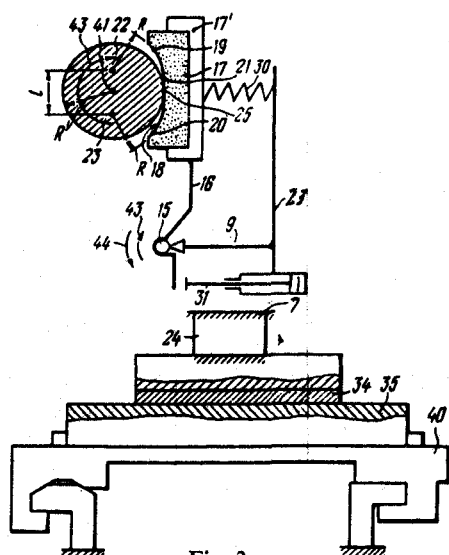


Fig. 2

Compl. Specn. 20 Pages.

Drgs. 8 Sheets.

CLASS : 32-F1; 55-D1.

168494

Int. Cl. : C 07 c 120/00, 121/66;

C 07 d 307/46; A 01 n 37/74.

A PROCESS FOR THE PREPARATION OF 4-CYANO-4-(FLUORO PHENYL)-3-(SUBSTITUTED PHENYL) BUTYRIC ACID, ESTERS AND DERIVATIVES THEREOF.

Applicant : AMERICAN CYANAMID COMPANY, OF THE TOWNSHIP OF WAYNE STATE OF NEW JERSEY, U.S.A.

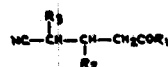
Inventors : (1) STEPHEN S. SZUCS, (2) LAURA SUE QUAKENBUSH, (3) PIERRE ANTOINE MARC.

Application No. 864/Cal/1987, filed on 3rd November, 1987.

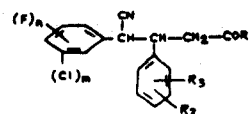
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 5 Claims

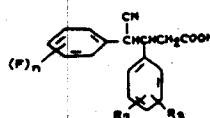
A process for the preparation of 4-cyano-4-(fluorophenyl)-3-(substituted phenyl) butyric acid, esters and derivatives of the Formula I as shown, wherein  $R_1$  is OH, OR,  $NR_2R_3$ , OM, benzyloxy  $C_2-C_3$  alkyl, benzyl or furfuryl;  $R_2$  and  $R_3$  are each hydrogen, fluorine, chlorine, bromine, iodine,  $NO_2$ ,  $C_2-C_4$  alkyl,  $C_1-C_4$  alkoxy  $OCHF_2$ ,  $OCF_2CF_2H$ ,  $OCF_3$ , S  $(O)_x$   $CH_3$  or S  $(O)_x$   $CF_2R_7$ , wherein  $x$  is 0, 1 or 2 and  $R_7$  is H, F,  $CHFCL$ ,  $CF_2H$  or  $CF_3$ ; provided that  $R_2$  and  $R_3$  are not both hydrogen;  $n$  is an integer of one to three;  $m$  is zero or one;  $R_4$  is alkyl  $C_1-C_4$ ; monohaloalkyl  $C_1-C_4$ , hydroxyalkynyl  $C_4-C_6$ , monohaloalkynyl  $C_4-C_6$ , monohaloalkenyl  $C_3-C_4$  alkoxy  $C_1-C_4$  or alkyl  $C_1-C_4$ ;  $R_5$  and  $R_6$  each independently represent members selected from the group consisting of hydrogen and alkyl  $C_1-C_3$ ;  $M$  is an alkali metal, ammonium,  $C_1-C_4$  mono or dialkylammonium or hydroxyethylammonium; and the stereo-isomers thereof, characterized by reacting sodium methoxide with appropriately substituted fluorophenylacetonitrile and an alkyl substituted cinnamate in cooled toluene to form a reaction mixture; warming the mixture to room temperature; and separating the mixture of erythro-thre 4-cyano-3-(substituted phenyl)-4-(fluorophenyl) butyryl compound from the warmed reaction mixture by partitioning the mixture using a liquid mixture having organic solvent in water and treating the partitioned material with magnesium sulfate.



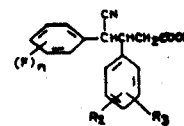
Formula A



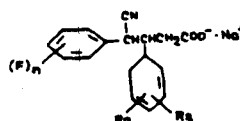
Formula I



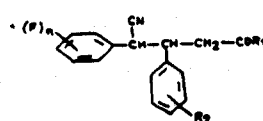
Formula IA



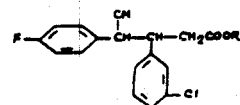
Formula IB



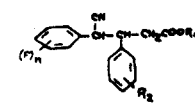
Formula IC



Formula ID



Formula ID



Formula IE

Compl. Specn. 96 Pages.

Drgs. 3 Sheets.

CLASS : 63-A2.

168495

Int. Cl. : H 02 k 17/00.

A.C. ELECTRICAL MACHINES.

Applicant : PSM TECHNOLOGIES INC., SILVER SPRING, MARYLAND, USA 20907, UNITED STATES OF AMERICA.



Inventors : (1) STEPHEN BRUCE KUZNETSOV, (2) ERIC ROBERTS LAITHWAITE.

Application No. 866/Cal/1987, filed on 4th November, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

### 9 Claims

An alternating current electrical machine comprising a first winding and a second winding (as hereinbefore defined) both of electrically conductive material and a flux-permeable gap between them, wherein the first winding is an asynchronous condenser winding which creates and maintains along the gap a transient and variable electrical and/or magnetic field conditions across the gap without any change in the frequency of the alternating current applied to the machine in order to result in a change of effective field speed along the said magnetic air gap whereby the first and the second windings interact to produce in the first winding negative reactive volt amperes (i. e. alternating current of the applied frequency of a leading power factor).

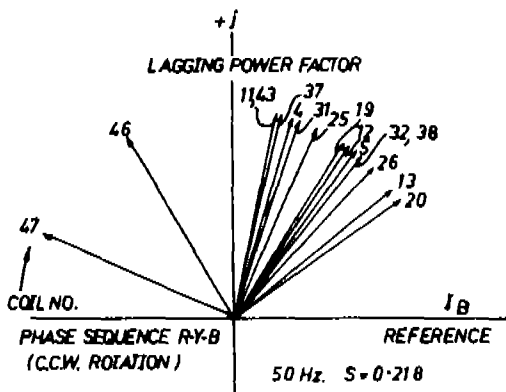


Fig. 3

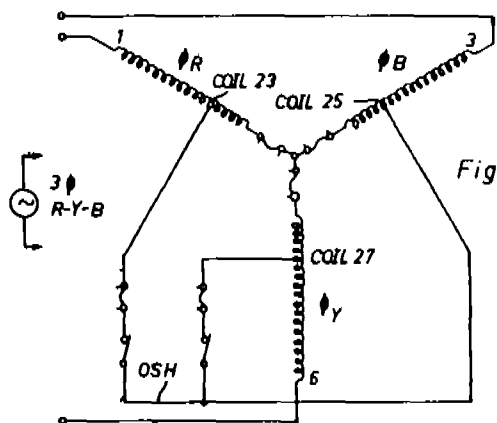


Fig. 4

Compl. Specn. 26 Pages.

Drgs. 7 Sheets.

CLASS : 68-El  
Int. Cl. : G 05 f 1/10.

168496

A SWITCHING-TYPE STABILIZING POWER SUPPLY CIRCUIT.

Applicant : GOLDSTAR CO. LTD., OF LUCKY-GOLDSTAR TWIN TOWERS, 20 YOIDO-DONG, YONGDUNGPO-GU, SEOUL 150, SOUTH KOREA.

Inventor : CHAN WOONG PARK.

Application No. 868/Cal/1987, filed on 4th November, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

### 2 Claims

A switching-type stabilizing power supply circuit having a magnetically excited blocking oscillation wherein the induced voltage at the secondary winding ( $N_2$ ) of transformer (T) is applied via a capacitor ( $C_1$ ) and a resistor ( $R_4$ ) to diode ( $D_1$ ) and the base of a switching transistor ( $Q_1$ ), characterised in that a connection node of the secondary winding ( $N_2$ ) of said transformer (T) and the capacitor ( $C_1$ ) is connected via a resistor ( $R_5$ ) to the base of a transistor ( $Q_2$ ), the emitter of which is connected via a resistor ( $R_6$ ) and a capacitor ( $C_4$ ) to the base of said switching transistor ( $Q_1$ ); and a connection node of said resistor ( $R_6$ ) and said capacitor ( $C_4$ ) is connected via a diode ( $D_2$ ) to the connection node of said secondary winding ( $N_2$ ) and said capacitor ( $C_1$ ), and a connection node of said resistor ( $R_6$ ) and said capacitor ( $C_4$ ) are connected via a zener diode ( $D_3$ ) to the base of said transistor ( $Q_2$ ) while it is connected via the diode ( $D_3$ ) to a connection node of said secondary winding ( $N_2$ ) and said capacitor ( $C_1$ ).

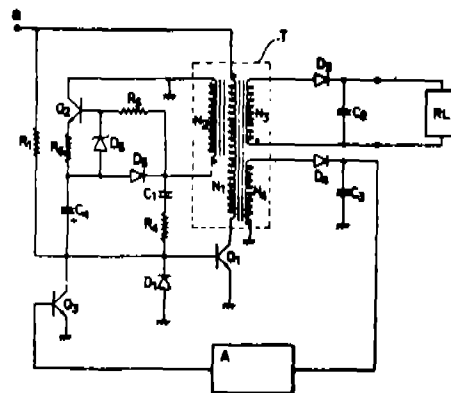


Fig. 1

Compl. Specn. 15 Pages.

Drgs. 2 Sheets.

CLASS : 17-A1.  
Int. Cl. : C 12 g 1/00.

168497

### PROCESS FOR PRODUCING SPARKLING WINES.

Applicant : (1) NAUCHNO-PROIZVODSTVENNOE OBIE-DINENIE NAPITKOV I MINERALNYKH VOD, OF ULITSA ROSSOLIMO, 7, MOSCOW, USSR; (2) VSESOJUZNY ZAOCHNY INSTITUT PISCHEVOI PROMYSHLENNOSTI OF ULITSA CHKALOVA, 73, MOSCOW, USSR.

Inventors : (1) NASKID GRIGORIEVICH SARISHVILI, (2) EVGENY NIKOLAEVICH STORCHEVOI, (3) VYACHESLAV MIKHAILOVICH VAGANOV, (4) BELLA BORISOVNA REITBLAT.

Application No. 877/Cal/1987, filed on 9th November, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 3 Claims

A process for producing sparkling wine in a continuous flow, comprising deaeration of a blend of white wine material known per se in the presence of one part of yeast immobilized on a sorbent; adaptation of another part of yeast to conventional champagnization conditions, carried out in a champagnization zone, contact of the yeast with wine subjected to champagnization being excluded; mixing of the yeast with one part of liqueur prior to completion of the adaptation; subsequent introducing of the mixture of the yeast with the liqueur into the champagnization zone under a layer of a sorbent provided therein and introducing also thereunder a blend of red wine materials known per se or the deaerated white wine materials and another part of liqueur for carrying out secondary fermentation and subsequent enrichment of the wine being champagnized with the products of yeast autolysis; removal of the champagnized wine from the champagnization zone; its chilling, filtering, and bottling all by conventional methods.

Compl. Specn. 13 Pages.

Drg. 1 Sheet.

CLASS : 154-D.

168498

Int. Cl. : B 05 c 9/00.

# A COATING APPARATUS FOR APPLYING COATING MATERIAL TO THE SURFACE OF A PAPER WEB.

Applicant : BELOIT CORPORATION, OF P.O. BOX 350, BELOIT, WISCONSIN 53511, U.S.A.

Inventors : (1) HARUYOSHI FUJIWARA, (2) TOSHIHIRO TOYOFUKU.

Application No. 902/Cal/1987, filed on 18th November, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 6 Claims

A coating apparatus suitable for applying coating material to the surface of a paper web running through the gap between a backing roll and an applicator roll which rotate at given speed, characterized by comprising a nip roll, which rotates at a given speed, installed movably against a nip section of said backing roll and said applicator roll on the outlet of the rolls near said nip section.

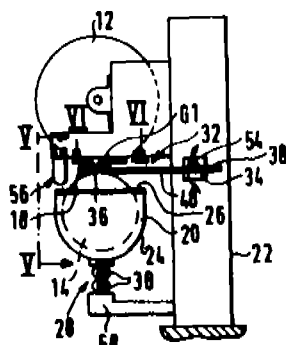


Fig. 4

Compl. Specn. 16 Pages.

Drgs. 2 Sheets.

CLASS : 138-F.

168499

Int. Cl. : E 21 b 10/42.

# ARTICULATING STEEL CAP FOR UNDERGROUND MINING SUPPORT STRUCTURES.

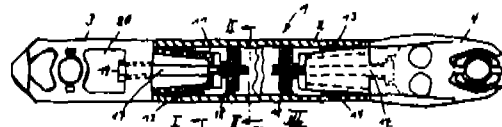
Applicant & Inventor : MARTHA-CATHARINA HEILIGER, OF HOCHKOPPEL 11, 5166 KREUZAU, WEST GERMANY.

Application No. 906/Cal/1987, filed on 19th November, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 7 Claims

Articulating steel cap for underground mining support structures, having a hollow sectional profile of certain length at one end of which there is provided a tip as an insert and at the other end of which there is provided a fork as an insert whereby the connection between the insert and the hollow sectional profile is constructed as a plug-in connection characterized in that each said inserts (3, 4) has at its end facing the sectional profile constructed as an integral box profile, a profiled plug (5, 6) with a cross-section corresponding to the cross-section of said hollow sectional profile, each profiled plug having at least one longitudinally inclined surface (7-10), a movable wedge element (11-14) being allocated to each longitudinally inclined surface, said wedge element may be pulled into the hollow sectional profile (2) between said longitudinally inclined surface (7-10) and an inner surface (15, 16) of said hollow sectional profile.



Compl. Specn. 15 Pages.

Drg. 1 Sheet.

CLASS : 76-E.

168500

Int. Cl. : A 44 b 19/00.

# A METHOD AND DEVICE FOR MANUFACTURING A SLIDE FASTENER TAPE HALF COMPRISING A STRINGER TAPE AND A WOVEN-ON HELICAL ROW OF SLIDE-FASTENER LINKS.

Applicant : OPTI PATENT—, FORSCHUNGS-UND FABRIKATIONS—AG., OF CH-8750 RIEDERN-ALLMEIND, SWITZERLAND.

Inventor : HELMUT HEIMBERGER.

Application No. 909/Cal/1987, filed on 20th November, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 6 Claims

A method of manufacturing a slide-fastener tape half comprising a stringer tape and a woven-on helical row of slide-fastener links made of plastics monofilament, the links having a preset pitch and connecting parts, a stringer tape being woven from weft threads and warp threads at a weaving station in a needle loom and the row of slide-fastener links being supplied under low tension to the weaving

station in the warp-thread direction, using a driven supply device adjusted to the progress of the weaving and positively engaging between the links in the row, the individual links being partially engaged by securing warp threads and the connecting parts being partially engaged by securing weft threads at the weaving station and the ratio of the picking motion of the securing weft threads being adjusted to the pitch, characterised in that a row of slide fastener links is supplied to the weaving station and comprised a textile filling core surrounded by the slide-fastener links and tied in by the securing weft threads during interlacing, the filling core is also positively engaged by the supply device, the supply device is disposed immediately in front of the weaving station and a tensile force directed away from the supply device is exerted on the row of slide-fastener links, including the filling core, entering the supply device.

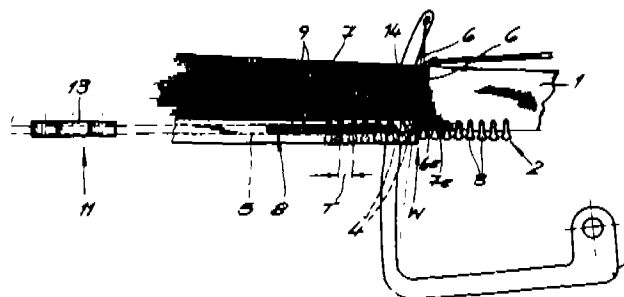


Fig. 1

Compl. Specn. 11 Pages.

Drgs. 3 Sheets.

CLASS : 10-F; 169-C.

168501

Int. Cl. : F 41 b 15/00.

#### GUN FOR FIRING CASELESS AMMUNITION.

Applicant & Inventor: SERGE LADRIERE, OF "LE COTAGE" 27, BOULEVARD DU PLAN DES ABEILLES 06230 SAINT JEAN CAP FERRAT, FRANCE.

Application No. 1010/Cal/1987, filed on 30th December, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

#### 13 Claims

Gun for firing caseless ammunition constituted by a projectile (6) provided with a powder charge (7), which has at least one tube (2) with an open end (2a) and a base (2b) opposite to said open end (2a), and a triggering device (3) for bringing about the firing of said powder charge via priming means (8), characterized in that the base (2b) of said tube (2) and the rear part of the projectile (6) are arranged so as to constitute a conical fit (9) having, level with the base (2b) of the tube (2), a female conical surface (10) and, level with the rear part of the projectile (6), a male conical surface (11), said two male (11) and female (10) conical surfaces having the same conicity, said conical force fit (9) constituting temporary retaining means which are no longer active as soon as the pressure developed in the base (2b) of the tube (2) reaches a sufficiently high value  $P_M$  to ensure the discharge of the projectile under satisfactory conditions.

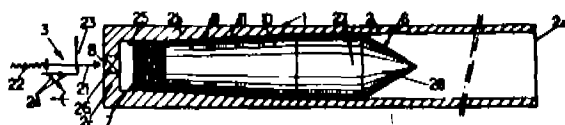


Fig. 1

Compl. Specn. 15 Pages.

Drgs. 4 Sheets.

CLASS.: 114 A, B

168502

Int. Cl. : C 14 C 15/00.

#### APPARATUS FOR TREATING SKINS OR HIDES IN WET PROCESSES.

Applicant: JOHS. KRAUSE GMBH, OF MASCHINENFABRIK, PLANCKSTR. 13-15, D-2000 HAMBURG 50, WEST GERMANY.

Inventor: ARNE PETERSEN.

Application No. 26/Cal/1988, filed January 13, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

#### 16 Claims

Apparatus for treating skins or hides with liquids in so-called wet processes, e.g. liming, drenching, tanning, dyeing or the like, comprising a liquid-impermeable substrate inflexibly receiving the hide and a treatment device substantially tightly applicable to the top of the hide by means of which the treatment liquid penetrates the skin under high pressure, characterized in that the treatment device (2) has several liquid supply ducts (7) arranged perpendicular to the substrate (1), the under-side (12) of the device (2) facing the hide (26) having enlarged portions and disposed in a surface-filling relationship thereon and that between the underside (12) of the device (2) and the hide (26) is provided a net-like support (27) and the gap between the substrate (1), hide (26), support (27) and treatment device (2) being tightly sealable with respect to the outside.

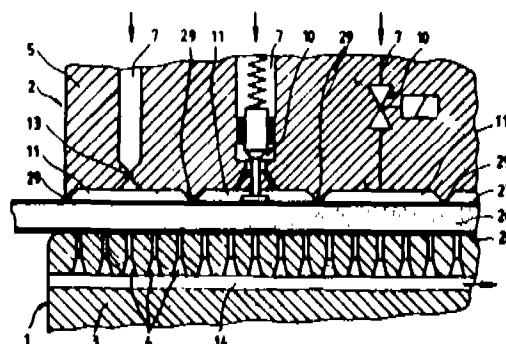


Fig. 2

Compl. Specn. 17 Pages.

Drgs. 4 Sheets.

CLASS.: 35 E

168503

Int. Cl. : C 04 b 33/00; 35/00; B 28 b 11/00

#### A METHOD FOR PRODUCING A SELF-SUPPORTING CERAMIC COMPOSITE STRUCTURE.

Applicant: LANXIDE TECHNOLOGY COMPANY, LP: TRALEE INDUSTRIAL PARK NEWYARK, DELAWARE 19711, U.S.A.

Inventors: (1) MARC STEVENS NEWKIRK & (2) HAROLD DANIEL LESHER.

Application No. 27/Cal/1988, filed January 13, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 14 Claims

A method for producing a self-supporting ceramic composite structure formed by oxidation of a parent metal such as herein described which includes the steps of; (a) disposing a mass of filler such as herein described within a segmented container comprised of at least one segment having a coefficient of thermal expansion which is greater than coefficient of thermal expansion of said mass of filler, said at least one segment being dimensioned and configured to define at least one expansion joint which is effective in accommodating thermal expansion of said at least one segment by circumferential expansion, thereby inhibiting radial expansion of said at least one segment so as to reduce volumetric expansion of said container; (b) heating said parent metal in the presence of an oxidant such as herein described to a temperature above the melting point of the parent metal but below the melting point of any resulting oxidation reaction product, to form a body of molten metal in surface contact with said mass of filler, and reacting said molten parent metal with said oxidant at said temperature form an oxidation reaction product, which product is in contact with and extends between said body of molten metal and said oxidant; (c) maintaining the temperature to keep the parent metal molten and progressively drawing molten parent metal through the oxidation reaction product towards the oxidant and into said mass of filler so that the oxidation reaction product continues to form within said mass of filler at an interface between the oxidant and previously formed oxidation reaction product and (d) continuing said reaction for a time sufficient to infiltrate said mass of filler to produce said ceramic composite structure comprising said oxidation reaction product.

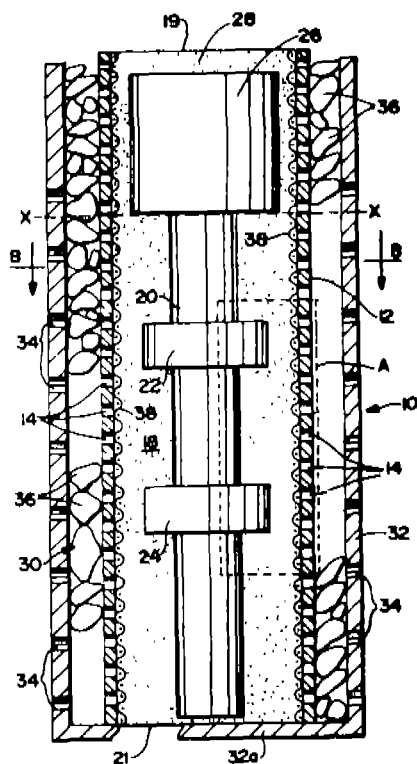


Fig. 1

Compl. Specn. 31 Pages.

Drgs. 3 Sheets.

CLASS.: 139 A

Int. Cl.: D 01 f 9/12.

168504

## AN IMPROVED PROCESS AND APPARATUS FOR PRODUCING CARBON FIBRES.

Applicant: DIDIER ENGINEERING GMBH, OF ALFREDS-TRASSE 28, D-4300 ESSEN 1, WEST GERMANY.

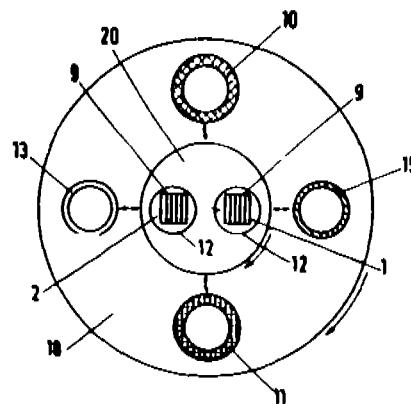
Inventors: (1) RUDOLF GEIER, (2) ROLOF JOEST, (3) WILHELM WULLSCHEIDT, (4) HORST MATHEJKA & (5) HEINRICH PATALON.

Application No. 37/Cal/1988, filed January 15, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 8 Claims

An improved process for producing carbon fibres from coal or lignite tar pitch, more particularly coal tarpitch, the same having non-melting constituents removed from it before spinning by filtration, wherein the pitch filtrate after removal of non-melting constituents, is subjected to distillation to remove volatile constituents, whereafter the pitch fibres spun from the resulting pitch melt are oxidised at a predetermined oxidation temperature and carbonised at a predetermined carbonisation temperature, said distillation by effected in a thin-film evaporator to raise the softening point of the pitch filtrate to values of at least 200°C (KS).



Compl. Specn. 20 Pages.

Drgs. 6 Sheets.

CLASS.: 104 P

Int. Cl.: C 08 j 3/24.

168505

## A NOVEL METHOD OF PRODUCING VULCANIZED PRODUCT.

Applicant: DEGUSSA AKTIENGESellschaft OF 6000 FRANKFURT AM MAIN, WEISSFRAUENSTRASSE 9, F.R. GERMANY.

Inventors: (1) DR. WERNER SCHWARZE, (2) SIEGFRIED WOLFF, (3) HANS REMMEL & (4) HORST LAMBERTZ.

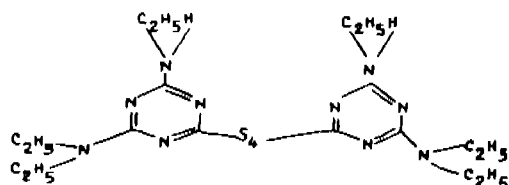
Application No. 46/Cal/1988, filed January 19, 1988.

Divisional of appln. No. 734/Cal/85, Ante-dated to 15th October, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

4 Claims

An improved method for producing vulcanized product which comprises vulcanizing in a known manner one or more natural or synthetic rubber, using vulcanization mixture containing usual fillers, sulphur and usual vulcanization additives characterized by the improvement that said vulcanization is carried out in the presence of a vulcanization accelerator selected from Bis-(2-ethyl-amino-4-diethylamino-*s*-triazine-6-yl) tetrasulphide of Formula I of the accompanying drawings.



Formula I

in an amount of 0.3 to 15.0 parts by weight based on the weight of the rubber.

Compl. Specn. 26 Pages.

Drg. 1 Sheet.

Ind. Cl.: 32 C  
Int. Cl.: C 07 C 85/00.

168506

#### A PROCESS FOR THE PREPARATION OF ALIPHATIC OR AROMATIC SUBSTITUTED AMINES.

Applicant: IEL LIMITED, OF ICI HOUSE, 34 CHOWRINGHEE ROAD, CALCUTTA-700 071, WEST BENGAL, INDIA.

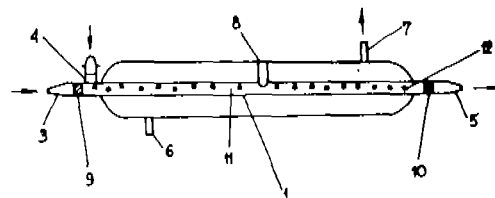
Inventors: (1) DOBLE MUKESH, (2) MANISH SARKAR & (3) ANKUR ASUTOSH BANERJEE.

Application No. 60/Cal/1988, filed January 28, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

14 Claims

A process for the preparation of aliphatic or aromatic substituted amines by the catalytic transfer hydrogenation of corresponding aliphatic or aromatic nitro compounds which comprises reacting a said nitro compound in one or more hydrogen donor solvents of the kind such as herein described in the presence of a hydrogenation catalyst with a ketone added thereto or formed *in situ* under atmospheric pressure and at a temperature of from 50°C to 1500°C whereby the hydrogen released from said donor solvent by said catalyst reduces said nitro compound to amine which is then condensed with said ketone to form amine which in turn is reduced by the generated hydrogen present to the corresponding amine, and thereafter isolating in any known manner the amines so produced from the reaction mixture.



Compl. Specn. 15 Pages

Drg. 1 Sheet.

Ind. Cl.: 34 D  
Int. Cl.: C 08 B 11/00, 11/02.

168507

#### A PROCESS FOR PREPARING A POLY (ALKYL ETHER) OF A POLYGALACTOMANNAN.

Applicant: HI-TEK POLYMERS, INC., LOCATED AT 9814 E. BLUEGRASS PARKWAY, JEFFERSONTOWN, KENTUCKY 40299, U.S.A.

Inventors: (1) GEORGE M. ZODY, (2) MICHAEL E. MORGAN.

Application No. 79/Cal/1988, filed on January 29, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

12 Claims

A process for preparing a poly (alkylether) of a polygalactomannan having at least two different alkyl ether substituents as defined herewith which comprises:

(a) reacting the polygalactomannan with an alkyl halide or an alkylene oxide to obtain an alkyl ether substituent selected from the group consisting of R— and HOR<sup>1</sup>—, wherein R— is an alkyl group containing one to four carbon atoms, wherein R<sup>1</sup>— is an alkylene group containing two to four carbon atoms, wherein the OH groups is on the carbon atoms beta to the ether group, and wherein the alkyl ether substituent is present in an M.S. of 0.3 to 1.5; and

(b) reacting the product of (a) with a long chain epoxy compound containing from 8-28 carbon atoms or a long chain alkyl halide containing from 9-28 carbon atoms to obtain an alkyl ether substituent selected from the group consisting of R<sup>2</sup>—, HOR<sup>3</sup>—, and R<sup>4</sup>—OCH<sub>2</sub>—CH—CH<sub>2</sub>—, wherein R<sup>2</sup> is an alkyl group containing eight

OH

to twenty carbon atoms, wherein R<sup>3</sup> is an alkylene group which contains 8 to 28 carbon atoms having an OH group on the carbon atom beta to the ether group, wherein R<sup>4</sup> is an alkyl group containing 5 to 25 carbon atoms and wherein the substituent is present in an M.S. of 0.001 to 0.2, the reaction (b) being conducted in a solvent such as here in described with an alkaline catalyst such as herein described.

Compl. Specn. 19 Pages.

Drg. Nil.

Ind. Cl.: 32 A1.  
Int. Cl.: C 09 B 45/00, 45/12.

168508

#### PROCESS FOR THE PREPARATION OF THE LITHIUM SALT OF A FIBER-REACTIVE AZO DYESTUFF.

Applicant: HOECHST AKTIENGESellschaft, D-6230 FRANKFURT AM MAIN 80, F.R. GERMANY.

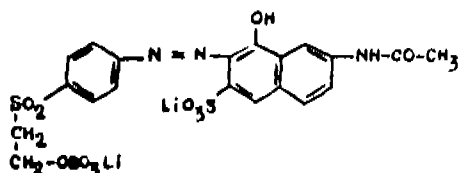
Inventors: (1) KONRAD OPITZ & (2) MARCOS SEGAL.

Application No. 87/Cal/1988, filed on February 1, 1988.

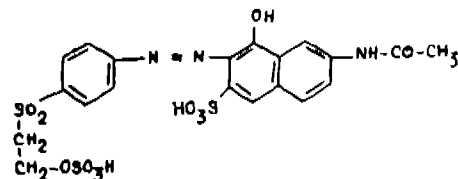
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

### 3 Claims

A process for the preparation of the lithium-azo compound of the formula (1) of the accompanying drawings with an Na content of less than 0.2 by weight, in particular less than 0.1% by weight which comprises diazotizing at a temperature between  $-5^{\circ}\text{C}$  and  $+20^{\circ}\text{C}$  and at a pH of 2 or less than 2, the lithium salt of 4-( $\beta$ -sulfatoethylsulfonyl)-aniline in an aqueous solution or in an aqueous solution containing a water-miscible organic solvent by means of nitrosylsulfuric acid, and coupling at a temperature between 0 and  $30^{\circ}\text{C}$  and at a pH between 3 and 7 the product with the lithium salt of 1-hydroxy-7-acetyl-aminonaphthalene-3-sulfonic acid.



Formula (A)



Formula (1)

Compl. Specn. 14 Pages.

Dr. 1 Sheet.

Ind. Cl.: 160 C

168509

Int. Cl.: B 60 t 10/00.

### IMPROVEMENTS TO ELECTRIC RETARDERS FOR VEHICLES.

Applicant: LABAVIA S.G.E., OF 5, AVENUE NEWTON, PARC D, ACTIVITIES 78391, MONTIGNY LE BRETONNEUX, FRANCE.

Inventors: (1) MARC CHARBONNIER & (2) MICHEL DURAND.

Application No. 122/Cal/1988, filed on February 11, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

### 3 Claims

Electric retarder for vehicle, comprising an inductor stator itself comprising a ring of electric coils (3) with axes parallel to the axis of the retarder, supported by an annular framework (1), and an armature rotor comprising two magnetic material disks (12) which axially

enclose the ring of coils and which are both connected, through rings of bent arms (14), to a central collar (15) itself connected angularly with a section (17) of the transmission shaft to be retarded of the vehicle, the annular framework including a central socket (5) penetrating into the rotor, radial arms (6) extending this socket externally, a ring (8) carried by these arms and supporting the coils, and bearing surfaces (38, 39) for fixing the framework on the chassis of the vehicle (2), said shaft section to be slowed down (17) being mounted inside the socket (5) by means of two bearings (19, 20), characterized in that the socket (5) is truncated cone shaped, in that the central collar (15) of the rotor is connected to the shaft section (17) by means of a pot (16) with cylindrical side wall covering the narrow end of the socket and in that the two bearings housed in this socket are a relatively small bearing (19) disposed in the vicinity of said narrow end of the socket, inside the pot (16)—collar (15) assembly, and relatively large bearing (20) adapted for absorbing the axial forces and disposed in the vicinity of the widened end of the socket.

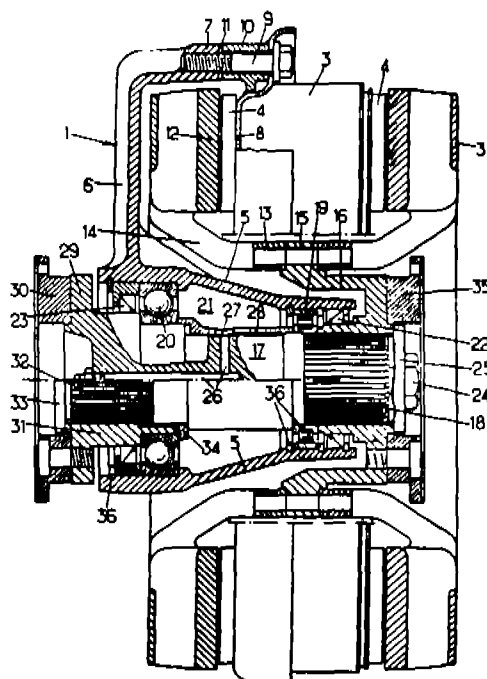


Fig. 1

Compl. Specn. 10 Pages.

Dr. 2 Sheets.

Ind. Cl.: 32—F1; F2(a); F2(b)

168510

Int. Cl.: C 07 C 102/00, 103/10.

### PROCESS FOR THE PREPARATION OF ACETOACETYLARYLAMIDES AND—HETEROARYLAMIDES OF DEACTIVATED AROMATICS.

Applicant: HOECHST AKTIENGESellschaft, D-6230 FRANKFURT AM MAIN 80, F.R. GERMANY.

Inventors: (1) THEODOR PAPENFUHS & (2) WOLFGANG DAUB.

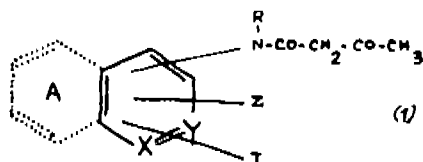
Application No. 123/Cal/1988, filed on February 11, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

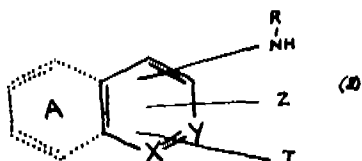
## 5 Claims

A process for the preparation of an acetoacetylarylamide or heteroarylamide of a deactivated aromatic or heteroaromatic of the formula (1) in which X and Y each denote CH or one of the two ring members X and Y represents a nitrogen atom, A denotes a benzene ring, which is fused to the ring containing the x=y group both of which rings can be substituted by T, Z and R

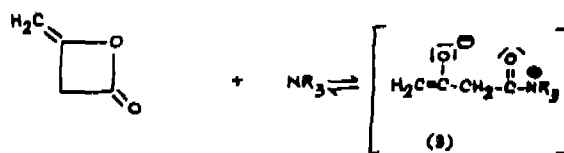
—N—CO—CH<sub>2</sub>—CO—CH<sub>3</sub>, R above denotes a hydrogen atom, a linear or branched alkyl group of 1 to 6 carbon atoms, a cycloalkyl group which has 5 or 6 carbon atoms and can be substituted by 1 to 3 alkyl groups of 1 to 4 carbon atoms, a β—hydroxyethyl group, the benzyl group or a phenyl group which can be substituted by fluorine, chlorine, bromine and/or iodine atoms and/or a nitro group and/or linear or branched alkyl groups and/or alkoxy groups of in each case 1 to 4 carbon atoms or an optionally substituted phenyl group, Z denotes a fluorine, chlorine, bromine or iodine atom or a group from the series comprising m—OR', —OCOR', —SO<sub>2</sub>R', —SO<sub>2</sub>NR'R'', —SO<sub>2</sub>R', —SR', —CO<sub>2</sub>, —NH—CO—OR', —NH—CO—CH<sub>2</sub>—CO—CH<sub>3</sub>, —PO (OR')<sub>2</sub>, —PO (NR'R'')<sub>2</sub>, —COOR', —CN, —CONR'R'', —COR', halogenoalkoxy having 1 to 4 carbon atoms, halogenoalkyl having 1 to 8 carbon atoms, halogen in each case denoting fluorine, chlorine or bromine, or a phenyl group which can be substituted by fluorine, chlorine, bromine and/or iodine atoms and/or nitro, cyano, —COR' and/or —COOR' groups, or can also represent a hydrogen atom if X or Y denotes a nitrogen atom wherein R' and R'' represent hydrogen atoms, linear or branched alkyl groups of 1 to 6 carbon atoms, cycloalkyl groups which have 5 or 6 carbon atoms and can be substituted by 1 to 3 alkyl groups of 1 to 4 carbon atoms, or β—hydroxyethyl groups, benzyl groups or phenyl groups which can be substituted on the aromatic nucleus by fluorine, chlorine, bromine or iodine atoms and/or nitro groups and/or linear or branched alkyl groups and/or alkoxy groups of in each case 1 to 4 carbon atoms, T denotes a hydrogen atom, one or more linear or branched alkyl groups or alkoxy groups of 1 to 6 carbon atoms or a cycloalkyl group which has 5 to 6 carbon atoms and can be substituted by 1 to 3 alkyl groups of 1 to 4 carbon atoms, or an amino group, which is substituted by two alkyl groups of 1 to 4 carbon atoms, or a β—hydroxy—ethyl group or T also represents one or two substituents mentioned for Z and in the case of fluorine, chlorine and/or bromine, more than two, of the substituents mentioned for Z, in a good yield and high purity, which comprises reacting 1 mole of an amine of the general formula (2) in which A, R, T, X, Y and Z have the abovementioned meanings, with 1 to 12 moles of diketene at temperatures of 20 to 100°C in glacial acetic acid in the presence of 1 to 20 mol per cent of a basic catalyst such as herein described based on the amine of the abovementioned formula (2) employed.



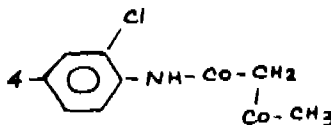
Formula (1)



Formula (2)

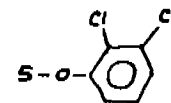


Formula (3)



Formula (4)

Comp. Specn. 30 Pages



Formula (5)

Drg. 1 Sheet.

## REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years, from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entry is the date of the registration in the entry.

- Class 1 No. 162393. Earl Bihari Private Limited of 148-B, St. Cyril's Road, Bandra, Bombay-400050, Maharashtra, India. "Drawer Slides". August 7, 1990.
- Class 1 No. 162489. Meher Distilleries Pvt. Ltd., an Indian Company of Village Aswa, Tehsil Dahnu, Dahnu Road, Dist : Thane, Maharashtra, India. "Metallic Bottles". September 11, 1990.
- Class 1 No. 162517. Klaas Equipment Pvt. Ltd. of 4th floor, Dr. Annie Besant Road, Worli, Bombay 400018, Maharashtra, India. "Printer". September 19, 1990.
- Class 1 No. 162535. Maliram Makharia Surgicals Pvt. Ltd., of 413-G, Basant Wadi, 5th floor, Kalbadevi Road, Bombay 400002, Maharashtra, India. "Surgical Needle Assembly". September 26, 1990.
- Class 1 No. 162579. Peico Electronics & Electricals Limited of Shivsagar Estate, Block 'A', Dr. Annie Besant Road, Worli, Bombay-400018, Maharashtra, India, an Indian Company. "Luvre for Lighting Fixture". October 15, 1990.
- Class 1 Nos. 162771 & 162772. Partecipazioni Bulgari S.P.A., Italian Company of No. 5, Via Gregoriana-00187, Roma, Italy. "Ring". December 19, 1990.
- Class 1 Nos. 162773 & 162774. Partecipazioni Bulgari S.P.A., Italian Company of No. 5, Via Gregoriana-00187, Roma, Italy. "Bracelet". December 19, 1990.
- Class 1 Nos. 162775 & 162776. Partecipazioni Bulgari S.P.A., Italian Company of No. 5, Via Gregoriana-00187, Roma, Italy. "Necklace". December 19, 1990.
- Class 1 No. 162834. Purolator India Ltd., 1, Sri Aurobindo Marg, New Delhi-110016, India, an Indian Company. "A cover assembly". January 14, 1991.

- Class 1 No. 162847. Poppy Dandiya, SB-37-Bhawani Singh Road, Jaipur-302015, Rajasthan, India, an Indian National. "Ring". January 16, 1991.
- Class 3 Nos. 162448 to 162452. Paharpur Industries Limited, 25, Community Centre, East of Kailash, New Delhi-110048, India, an Indian Company. "Pouch". August 27, 1990.
- Class 3 No. 162456. Shreeji Products, Udyognagar, Plot No. 8, 1st floor, S.V. Road, Goregaon (W), Bombay-62, Maharashtra, India, a Partnership Firm. "Clock". August 28, 1990.
- Class 3 No. 162465. Chandrikaben Prafulchandra Shah trading as Zeal Pharmaceuticals of 746, Limda Pole, Saraspur, Ahmedabad-380018, Gujarat, India. "Container". August 29, 1990.
- Class 3 No. 162469. Special products and Service, Arjun Bldg., Flat No. 5, Plot No. 144, Sher-e-Punjab Soc., Mahakali Caves Road, Andheri (E), Bombay-93, Maharashtra, India, Indian Proprietary Firm. "Drawer Pulling Attachment". August 30, 1990.
- Class 3 No. 162470. Minni Trading Corporation, 5-B, Kanchan Villa, Goraswadi, Malad (West), Bombay-64, Maharashtra, India, Indian Partnership Firm. "Cap". August 30, 1990.
- Class 3 Nos. 162518 & 162519. Minni Trading Corporation, 5-B, Kanchan Villa, Goraswadi, Malad (West), Bombay-64, Maharashtra, India, Indian Partnership Firm. "Cap". September 19, 1990.
- Class 3 No. 162478. Telefonica De Espana S.A., a Spanish Company of Gran Via, 28 28013, Madrid, Spain. "A device for ejecting and retaining sleeves of the printed circuit board". September 6, 1990.
- Class 3 No. 162523. Rainbow Cosmetics of 50C, Bangur Avenue, Calcutta-700055, W.B., India, Indian Proprietary Firm. "Container". September 21, 1990.
- Class 3 No. 162525. Rajen Industrial Corpn., 95/205, Dadasaheb Phalke Road, Dadar (CR), Bombay-400014, Maharashtra, India: Indian Proprietary Firm. "Grinder-cum mixer". September 24, 1990.
- Class 3 No. 162529. Colgate-Palmolive Company of 300 Park Avenue, New York, New York 10022, U.S.A. "Tooth-brush". September 24, 1990.
- Class 3 No. 162536. Maliram Makharia Surgicals Pvt. Ltd., 413-G, Basant Wadi, 5th floor, Kalbadevi Road, Bombay-400002, Maharashtra, India. "Surgical Needle Assembly". September 26, 1990.
- Class 3 No. 162577. Peico Electronics & Electricals Ltd. of Shivsagar Estate, Block "A", Dr. Annie Besant Road, Worli, Bombay-400018, Maharashtra, India, Indian Company. "Diffuser for lighting fixture". October 15, 1990.
- Class 3 Nos. 162582 & 162583. Peico Electronics & Electricals Ltd. of Shivsagar Estate, Block "A", Dr. Annie Besant Road, Worli, Bombay-400018, Maharashtra, India, Indian Company. "Rail for lighting fixture". October 15, 1990.
- Class 3 No. 162674. Crystal Plastics & Metallizing Pvt. Ltd., Sanghi House, Palkhi Galli, Off Veer Savarkar Marg, Prabhadevi, Bombay-400025, Maharashtra, India. "Comb". November 19, 1990.
- Class 3 No. 162757. Siris Agro Limited of L.B. Nagar, Hyderabad-500963, A.P., India, Indian Company. "Bottle". December 12, 1990.
- Class 3 No. 162761. Achal Anil Bakeri, Indian, of 13, Sadma Society, Navrangpura, Ahmedabad-380009, Gujarat, India. "Exhaust Fan". December 13, 1990.
- Class 3 No. 162762. Achal Anil Bakeri, Indian, of 13, Sadma Society, Navrangpura, Ahmedabad-380009, Gujarat, India. "Room Heater". December 13, 1990.
- Class 3 No. 162813. Rolex Komb Industries, Partnership Firm of 58/60, Sutar Chawl (2nd flr), Bombay-400022, Maharashtra, India. "Comb". January 4, 1991.
- Class 5 No. 162458. The Assam Company Ltd. of 52, Chowringhee Road, Calcutta-700071, W.B., India, Indian Company. "Pouch". August 28, 1990.
- Class 10 Nos. 162784 to 162793. Bata India Limited, 30, Shakespeare Sarani, Calcutta-700017, W.B., India. "Footwear". December 26, 1990.
- Class 12 No. 162745 to 162747. Synthetic Esters & Chemicals, Proprietary Firm of 142, Atur Terraces, Cuffe Parade, Bombay-400005, Maharashtra, India. "Toilet Soap". December 11, 1990.
- Copyright extended for the 2nd period of five years*
- Nos. 156686, 156712, 156905, 156904, 156903, 161588, 156544, 156527 & 152628 ..... Class 1
- Nos. 157118, 156979, 157072, 156685, 162281, 162411, 156484 & 156509 ..... Class 3
- No. 156684 ..... Class 4
- Copyright extended for the 3rd period of five years*
- Nos. 161588, 150496 & 150495 ..... Class 1
- Nos. 162411, 162281, 150487, 150450, 150451 & 150254 ..... Class 3

R. A. ACHARYA

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DESIGNS AND TRADE MARKS.